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WORLD-WIDE

AIR TRANSPORTATION

AIR CARGO ★ ★ ★ AIR COMMERCE ★ ★ ★ AIR TRAVEL



MARCH
1947

In This Issue

• The Packaging

• The Art of Recharging

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Packaging

• Freight Forwarder
Case

• What Air Freight
Shippers Can Expect
from New York's
Glacier Industry
(Part 4)

• also

• Manager Charter

• Legal Notes

• Telewinds

• The Air World

• Short Take-Offs



No. 3

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AIR--X--PRESS

WHEN the good citizens of Baltimore, Maryland, read of the birth of quadruplets in their fair city recently, they also learned that Air Express did its share to make the quads as comfortable as possible. Flying from Chicago and arriving right behind the stork was an Air Express shipment of tuftless baby mattresses, the gift of a Baltimore furniture store. In more ways than one, it was a gala day for the quads and their parents, a former army sergeant and his British war bride.

★ ★ ★

SUCCULENT STEAKS and tender roasts are flying south of the Rio Grande nowadays to whet the appetites of Mexico City natives and visitors. A recent shipment of 3,000 pounds of frozen meat packed in 28 cartons, was dispatched by a Kansas City packer to the Mexican capital. It went in rail express service from K. C. to Houston, Texas, where it was transferred to international air express service for flight to Mexico City. This K. C. shipper reports that he ships meat regularly by Air Express to East and West Coast customers.

★ ★ ★

AIR EXPRESS speed and coordination was responsible for ending a serious breakdown in a Colorado power plant within 24 hours one day last month. On a Thursday morning, a 25 hp motor burned out in a power plant at Durango, Colorado, forcing the manager to shut down one generator.

"We got in touch with the manufacturer in Los Angeles at once," said the power man. "The factory had a replacement motor in stock and shipped it by Air Express on Thursday night. It arrived here on the 8:15 plane Friday morning and we had it in the plant by 10 o'clock."

★ ★ ★

"**FLIP**" is only a wire-haired terrier, but he has the distinction of being the first canine from Cranford, New Jersey, to take a trip via international air express. Flip's master, a Navy commander, was transferred to Puerto Rico recently. Since the terrier could not accompany his master's family (because of Naval regulations) he did the next best thing—he flew down to San Juan by Air Express. Flip's trip began in rail express service from Cranford to New York's La Guardia Field, where he was transferred to a Miami Plane. From Miami the terrier was flown in international air express service to San Juan and reunion with his skipper's family.

★ ★ ★

CUTTING SWEET PEAS late in the afternoon and having them sold the following morning in places 1500 miles away might have sounded like a fairy tale some years ago, reports the *Farmers Guide*, but with the "magic carpet" of Air Express, "nothing is impossible!" It seems that one of the latest inter-American agricultural business ventures is the shipping of cut flowers by air from Haiti to U. S. cities. In addition to the orchids and gardenias that are regular Air Express travelers, many other flowers are being air-spiced northward to supply popular demand. They include sweet peas, delphinium, baby's breath and scabiosa. After being gathered, the flowers are held in water a few hours to absorb enough moisture to "harden" them for the trip north.

What's so "alike" about these things?



Nylons have to get to sales on time. *Speed* counts. And the speed of Air Express delivers 'em pronto.

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Hangar Chatter

MR. RALPH W. EASTMAN, vice president of the State Street Trust Company, Boston, has offered to aid our philologist, Radames Yoiks, 3rd, in what the banker calls Yoiks' "helicopter predicament." (See *Hangar Chatter*, January, 1947.) The good banker admits his own puzzlement over the correct pronunciation of the word, "helicopter," until he came over a magazine clipping of October, 1943, date, which assured him that the first syllable leaned toward "hell" rather than toward "heel".

But Mr. Yoiks is not content to let matters lie where they are. No philologist he, Yoiks is quite willing to concede that the dictionary agrees with Mr. Eastman and his magazine clippings, but adds that it is "a hell of a twist for a respectable word corrupted by unthinking men."

Now let's follow our agitated Yoiks on this helicopter merry-go-round. Webster's New International Dictionary is the authority for the fact that the first syllable "hell" (pronounced "hell-i") finds its root in the Greek "helix" (pronounced "heel-ix"). This inconsistency is enough to cause Yoiks to lift one disdainful eyebrow and say: "Sorry mess, this. Can't stand such etymological slovenliness. If this keeps on, I shall insist that we grant license to such phrases as "Heel's beels!" and "Heel hath no fury like a woman scorned," and "Achilles' hell."

Can you anticipate the agitated state of mind of the manufacturers of the famous Helicat and Helldiver?

While the officials of Sikorsky, McDonnell, Firestone, and some others may accept Mr. Yoiks' protest perfunctorily and as a matter of course, we feel that a great deal of discomfort may accrue to Bell. If the philologist has his way, there is the imminent peril of the Buffalo manufacturer becoming Beel.

All things considered, it may be wise to avoid all these complications by merely dropping the word "helicopter" for a newer, more modern one—an appellation not fraught with jeopardy. Into this breach has leaped our Zeno McInnify with the admirable suggestion that since President Truman has seen fit to extend American influence to Greece and Turkey, we demand that our State Department insist that the Greeks change their "helix" to "hellix" in the interest of complete composure in our helicopter industry. Also, the Turks should deliver to us an adequate supply of whirling dervishes as auxiliaries when rotors fail.

All things considered, we seem to be drifting between Scylla and Charybdis. It seems that in favor of the rotary wing aircraft industry, international harmony, and the peace of mind of Radames Yoiks, 3rd, a moratorium on the word "helicopter" be declared and the usage of "aerial egg-beater" or "sky flail" made commonplace. Perhaps, in the near future, we'll drop those altogether for "windmill of the stratosphere."—R. M.

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No. 3

AIR
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March
1947

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THE COVER—The Pan American World Airways plane, the globe, and the exotic figures point up the fact that no place on earth is more than a handful of hours away.

JOHN F. BUDD, Editor and Publisher

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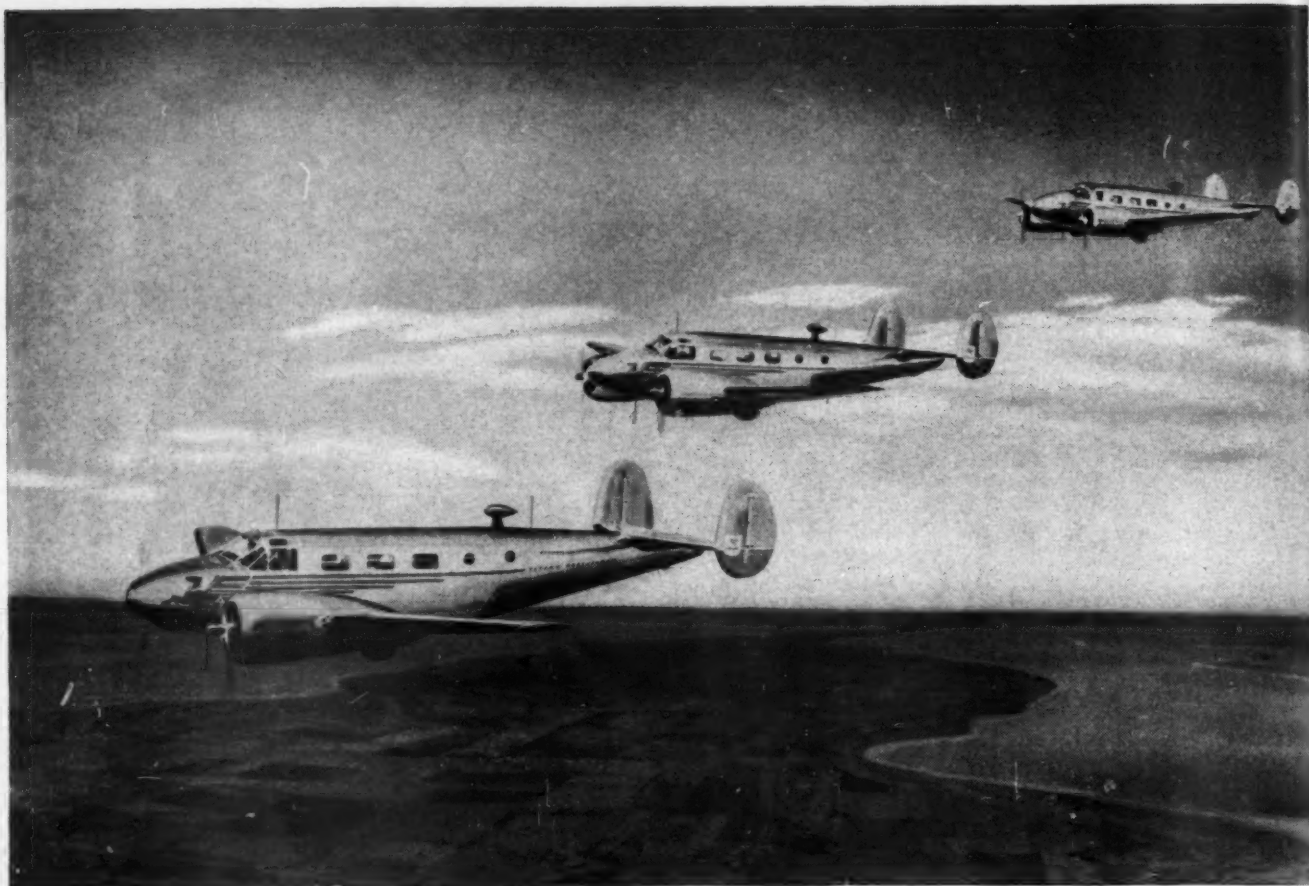
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PAGE 6—AIR TRANSPORTATION—*Air Commerce*

Beech Aircraft
CORPORATION  WICHITA, KANSAS, U. S. A.

Air Age Packaging



Emery F. Johnson

*What the scheduled airlines are doing about this all-important
business of correct packaging for air shipment*

THE scheduled airlines have a new twist to the old packaging problem, and perhaps their position may best be illustrated by an incident which features two points.

Some time ago, the cargo traffic manager of one of the nation's larger airlines was concentrating on the development of strawberry traffic from Louisiana to Eastern cities. Many of the berries were too ripe when picked to stand surface transportation over any distance from the growing fields and were commonly consumed on the spot in the manufacture of jams and jellies, despite the fact that they were the largest, ripest, and most luscious of the crop. They could withstand air transportation—which is Point Number One to keep in mind.

The cargo manager rounded up a quantity of single-layer candy boxes with transparent tops; stood 18 of the mammoth berries on their stem-ends in each box around a small paper container of powdered sugar, and arranged for their display by a concessionaire in certain New York theatre lobbies at a premium price. In all these arrangements, the cargo manager was acting almost precisely as and for the retailer—which is Point Number Two to remember.

The berries were an instant and tremendous success. Theater audiences, blase or not, seized upon them at intermission time, bought the entire stocks night after night, and stood around lobbies dipping them in the powdered sugar and enjoying them.

By EMERY F. JOHNSON

Secretary, AIR CARGO, INC.

Now for the two points illustrated: First, here was a product which could not move by surface but could by air. Second, the carrier departed from his traditional single role and acted with the dual perspective of a retailer. These are the two impelling considerations which have led the scheduled airlines to assume a new approach to the whole packaging problem. To help explain how they are jointly doing so is the purpose of this article.

Flexible Rules

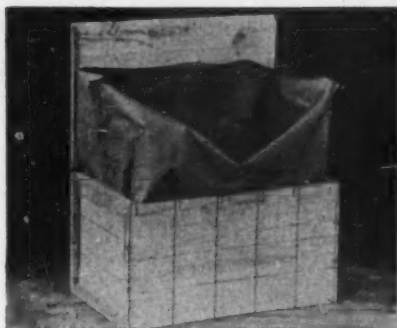
One of the most pointed questions a shipper can pose to an airline cargo official today is often a simple, "How do you recommend my product be packaged?" We have no Rule 41, nor does our response need be based upon anything so detailed and frequently restrictive at this stage of our development. Present air freight rules are normally as simple as: "Shipments must be so prepared or packed as to insure safe transportation with ordinary care in handling."

We know and so does the shipper, that there are countless new advances in both materials and techniques which can be utilized, and it is a safe assumption that the commodity in question is going to receive a better ride than ever

before. The tip-off on this was the airlines' experience of 19 years with air express. *This is proved by the fact that air express claims and payments have consistently been substantially less than those for rail on comparative bases.*

In a recent report made by the Shippers Research Division of the Air Transport Association, all of the environmental conditions encountered in air transport were surveyed. Sections of the report dealt with shock and vibration, including the impacts of take-off and landing, those encountered in rough or turbulent air, degrees of amplitude and frequency, etc. All of these findings were later compared with the similar data which already exist for other modes of transport. The verdicts are indisputably in favor of air. When considered in conjunction with the extreme permissible reductions of time in transit, they form the basis for the certain assumption of a better ride.

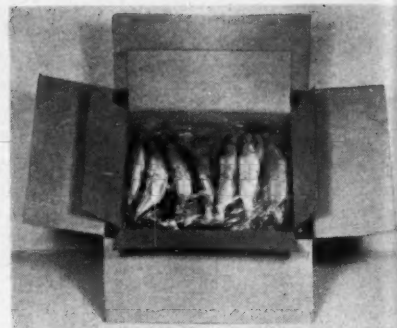
Experience is a better answer to the packaging problem than laboratory research. This is the well considered conclusion of the airlines. Since several years prior to World War II, the scheduled airlines have wrestled with the question of whether or not an industry-wide packaging research project should be undertaken. Only in late 1946 did they finally arrive at a negative answer. Prior to this decision, a number of excellent proposals for this new field were considered, including suggestions from Dr. Spencer A. Larsen, who has made such an outstanding contribution to air cargo research at Wayne University;



Aquastop-lined packing case able to resist corrosion.



Container specially designed for air-shipped chicks.



Fresh-caught trout wrapped in Pliofilm and packed in an Insulpak container.

Professor Charles Hauck, who has so excellently penetrated the consumer pre-packaging field at Ohio State University; and many other qualified individuals and organizations. Summarized, the most pertinent reasons for rejecting all proposals might be simply stated as: (1) there is no laboratory today better than the airlines' own services; and (2) the most fruitful results to date (especially true from the carriers' standpoint) have been obtained with packaging which helps enhance the ultimate sales value. (Note how these tie in with the two points raised in the strawberry illustration.)

The first airline objective is not that of the maximum amount of protection but rather that of the minimum amount needed. Then we must "try it out on the dog." For example, An excellent bulk package for asparagus was developed, but when put in use, it led to disappointing results. Upon arrival at destination, much of the vegetable was brown and worthless. Investigation then determined that this had been caused by too much enforced ventilation, which

literally "burned" the stalks while en route. The package was simply redesigned with fewer vents. No laboratory other than a plane in flight could have reproduced this condition. And who has more of these than the airlines themselves?

Development Necessary

For another illustration: Some items like furniture and stoves have been looked upon as feasible to move without requiring packaging of any type. Apparently that is true although the airlines are still keeping their fingers crossed. Ordinary household moving van practices and pads have so far proven quite sufficient. But there was no way to foretell this in a laboratory. With no substitute for the actual experience, no one can better develop this experience than the airlines.

In the field of retail packaging, the airlines acknowledge a sincere debt to the numerous package and container manufacturers who are helping to make the present program possible. Faced

with ever-larger demands for their products, accompanied by greater scarcities of raw materials, the majority of them, nevertheless, are sufficiently interested and farsighted to make time, talent, and some materials available for focusing upon the problems we and our shippers raise. Undoubtedly, this is a healthy situation in that it can and does bring the creative efforts of many experts, working with varied media and materials, to bear upon a given problem. Certainly the airlines could never afford to gather so much talent under one roof.

There are no set details that guide this voluntary cooperation. Some airline-container company relations represent the collaboration of several years while other new ones are being established continually. Some are based on more or less exclusive working arrangements—many others are not. In general, it begins to appear that, as might be expected, the more widespread the airlines' operations and problems, the more diversified are its container relationships, geographically and otherwise, with the smaller regional air carriers having established the fewest. Some of these have spread widely as a result of the excellence of the containers developed. It is understandable that if an airline and a particular container company develop the outstanding package for a particular commodity, it is only a matter of time before all other airlines are also using the same package from the same source.

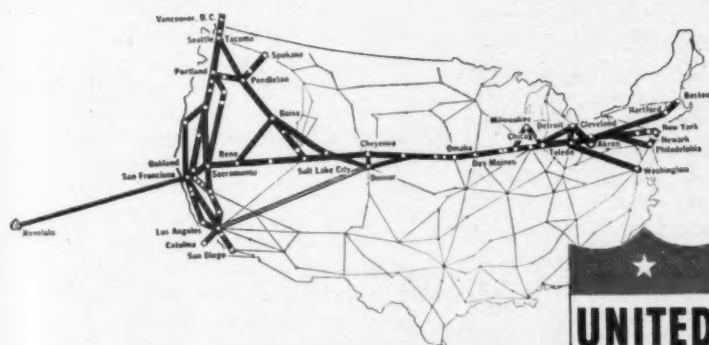
Admittedly, there are some *cul-de-sacs* plus a certain amount of lost and duplicated time and energy. Nevertheless, the approach is working. Because of its "grass roots" nature, it is bound to uncover and take advantage of as many new developments as possible. This latter aspect, incidentally, was one of the most troublesome for the airlines in their consideration of an industry-sponsored program, for it was apparent that a limited budget would be available from which they could

(Concluded on Page 36)



A not unusual type of cargo which illustrates various types of packaging for air shipment.

United Air Freight expands service in the Industrial East



AIR FREIGHT SERVICE

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Day of Reckoning

By WILLIAM A. PATTERSON

President, UNITED AIR LINES

A candid appraisal of the past, present, and future of air transportation

by an airline executive who tells why he does not view with alarm.

THE very people who just a few months ago were most optimistic concerning the future of the air transportation systems of our country are today the most pessimistic. Their pessimism toward the future is no more justified today than their optimism was last year. They didn't observe what the air transportation industry was going through three years ago and they have failed to observe the significance of what is happening today.

I welcome the opportunity to express my views in the hope that we can avoid the extremes in optimistic and pessimistic evaluations of this industry, but view it realistically with a balanced appraisal of the current airline situation.

All of us will agree, I believe, that the industry was on a sound financial footing as we entered the war and that it was making steady progress, and it will for many years to come, in the development of increased business. The conditions under which we operated during the war, and which gave rise to false optimism, are an important factor in analyzing this entire subject and should be reviewed.

At the start of the war, the airlines in the United States operated 359 airplanes. The airport facilities for handling these aircraft, buildings and hangars which we had at that time were already being taxed to their very limits. Unlike other industries which expanded during the war, the airlines were forced to reduce their combined fleet of airplanes. Early in 1942, 183 airplanes were taken for Army use, leaving the airlines a fleet of 176 planes. Despite this reduced number



William A. Patterson

of airplanes, however, the airlines surprised themselves by actually increasing the total tonnage carried. This was accomplished mainly by increasing the utility of aircraft from six hours a day to as high as 13½ hours a day. This was accomplished by operating airplanes at times of the day to suit our operating convenience and not the desires of our patrons for convenient departure or arrival time.

Easy Business

The passenger occupancy of our planes increased from a high of 70 percent to an average of 98 percent plus for the later war years. It was not necessary to promote new business. It came naturally. Eighty percent of all passengers carried during the later war

years as well as cargo shipments were mainly booked and controlled by military priorities offices.

There were no seasonal fluctuations in traffic. Demand was constant 365 days out of the year. Many people flew, not by choice, but by necessity. Very few were paying their fares from personal income. Directly and indirectly, travel expense was being charged to the cost of war. Overhead expenses of the airlines were at a minimum—not always by choice, but because of shortage of manpower. Government contracts for special services for flying and certain phases of manufacturing gave further spread of an already abnormally low overhead cost. In addition, many fully depreciated airplanes were in use. Wage stabilization prevented wage adjustments which were justified and this had further effect on low operating costs. These conditions were the most perfect that could ever be expected to produce airline profits—but they were abnormal in every respect. There will never be another repetition of those conditions except in case of war which none of us ever wants.

During this entire period, I am sure we will all agree that the airlines rendered the most outstanding service in flight and on the ground that was being offered in the entire transportation field. It was a main subject of conversation among experienced travelers. But by reason of the restriction of airline space by military priorities, many who would like to have traveled by air during the war years could not get seats.

As is frequently the case during such abnormal periods, particularly when they are periods of success, people lose their sense of judgment. They fail to analyze current conditions, although if one wanted to take time to view the circumstances objectively, it was fairly easy to see that everything was abnormal and that the existing situation could by no means be used as a measuring stick for the future.

It is not difficult for outsiders to reach wrong conclusions about the airline business, particularly those who do not have any responsibility for the success of the airlines. However, during the war period many of the operators themselves further encouraged the public impression of an unlimited airline future by their own optimism. In addition, the Civil Aeronautics Board, by statute charged with the responsibility for developing a sound and economical air transportation system, must also have permitted enthusiasm to outweigh better judgment. Otherwise, I believe the Board would have been more conservative in some of the decisions made during this period.

Sound Foundation

We in United Air Lines who were trying to guide the future of our company along sound and constructive lines recognized that the trend being followed was not as conservative as it should be. However, our views were cast aside lightly as coming from people who have no faith in the airlines' future. Actually, it was not a case of lack of faith. Our views were influenced by real confidence in the future of our business. Because of its great future we wanted to see that airline progress was kept on a sound foundation.

The honeymoon ended on V-J Day.

First, the psychology of the traveling public changed overnight. The public considered that the end of war automatically brought the end of inconveniences. The tolerance of people to wartime conditions evaporated overnight.

Although demand for travel was greater than at any time during the war, all transportation restrictions were removed and priorities eliminated. This resulted in the airlines facing the necessity overnight to handle an uncontrolled demand for air travel. Everything had to be done at once.

We had one advantage from which to start; it was our good fortune to have a strong pilot and mechanical personnel to assure a high standard of safety. No airline would have undertaken this rapid expansion had it not been for that fact.

Additional airplanes had to be acquired. New airplanes had been on



WRITES MR. PATTERSON:—"A business which makes possible shrinking the United States and the rest of the world to a fraction of the distances measured in past relationships and which will therefore have a profound effect on the social and economic habits of all people, wherever they may be, cannot fail to flourish." The above airport scene underlines the author's words. The plane is the five-mile-a-minute DC-6.

order for years, but we couldn't wait the necessary two years for the airplane factories to stop military production and build our new planes before we made any effort to break the bottleneck. The only immediate source of supply was from war surplus, and from that source we acquired four-engined transport airplanes. It was necessary practically to rebuild all airplanes received from war surplus at a cost almost equalling the prices we were paying for new airplanes of the very same types prior to the war. Because of the new postwar airplanes on order and to be delivered within 18 months to two years after surplus planes were put in service, it was only natural that their periods of usefulness would be extremely limited.

Meanwhile, a threefold expansion of personnel was necessary. Thorough training was given all new employees and the cost was extremely heavy because our new employees were like the new employees in other industries. They were not too sure just what they wanted to do, and the resulting turnover ran as high as four percent a month. Our employees are human beings, and like all others, they relaxed slightly from the strain of war pressure.

It was impossible to obtain working space overnight for these new employees. It was necessary to double up in quarters that were inadequate in 1941, when the onset of the war froze the expansion of plant facilities. Additional telephone equipment could not be supplied immediately. Although

several million dollars of new construction work was contracted for a year ago, because of shortage of materials and manpower, no complete new facility is yet available.

The industry now has about 600 planes with 16,000 seats compared to a prewar high of 359 planes with 6,734 seats, and a wartime low of 176 planes and 3,416 seats. With few exceptions, 1941 facilities, which were hardly adequate for handling the volume of traffic five years ago, are all we have to work with today.

Unfair Gripes

These circumstances combined to result in poor service to the public. Inaccurate information about the problem and a lack of knowledge of the companies and their philosophies brought forward many complaints even from our older and patient patrons. In addition, it became quite popular to write articles on what was wrong with the airlines, in spite of the fact that any of us could walk into almost any business organization and find the same problem created by the combinations of postwar conversion, material and labor difficulties, and excess of demand over supply. I feel that although what was said was true, it was unfair that we in the airline business were expected to be the only Houdinis in business generally.

Considering all these problems, I feel confident from my own experience and observations in other fields that the airlines have done and are doing

Airline employees were underpaid prior to and during the war. Wage stabilization prevented adjustment. One of the first actions was to increase salaries and wages, particularly in the lower wage groups. These have increased on an average of 28 percent, and 38 percent in the lower groups. Termination of Government contracts threw the full burden of overhead on commercial operations. New airplanes have reintroduced the item of heavy depreciation as a cost of operation. Inefficiency of newer employees, of whom 50 percent have been in the airline business less than one year, coupled with inadequate working facilities, have resulted in an efficiency of only 70 percent of that obtained in normal times.

Revenue Factor

Now we must consider the factor of revenues. The bottleneck in travel was broken shortly after Labor Day. The demand is now more in line with supply. I wouldn't say that the demand has been exhausted, but irregularity of operation has again brought about seasonal fluctuations. The present average airline capacity is approximately 74 percent, while the breakeven point during this conversion period is approximately 80 percent. Increases in passenger fares or in mail rates or in both are inevitable. United Air Lines is delaying its action on application for such

Today we know that there are certain inefficiencies and expense items within our control which should be corrected before we penalize the public and ourselves. I mention the possibility of penalizing ourselves because I feel it is a very important point. If we should charge our way, regardless of merit, to a more profitable operation, the management of our company will become satisfied with wartime and present-day inefficiencies as a new standard for the future. *I say that we will only settle for the prewar standard of efficiency as our goal from which to work, and we will not be satisfied with less.*

Eventually the new airplanes will be put to maximum use, but we prefer to make commitments for capital expenditures only for a reasonable period in advance. The carrying charges for sur-

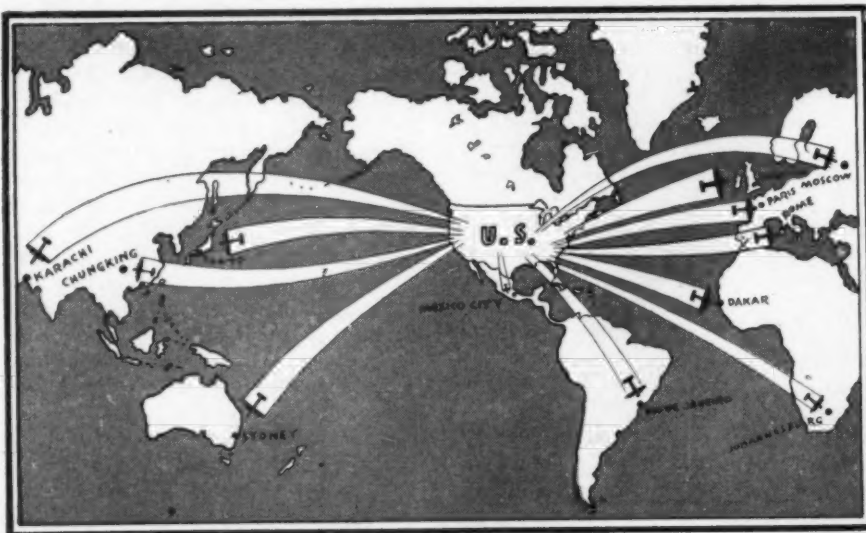
The wide difference of opinion among airlines on future volume of business has influenced materially their expansion ideas. We can only judge the wisdom of some of the expansion which has taken place by the financial condition and the credit standing of the different companies in different categories. I am certain that some are having a rude awakening as they look at their balance sheets and seek necessary financing to carry out their earlier dreams.

On Subsidies

There is no disgrace in subsidy to an airline serving a territory that needs service but yet is not sufficiently populated to permit the airline to be self-supporting. However, in certain cases, the course was taken to expand smaller companies into more heavily populated areas in competition with companies that were inherently larger because of the territory they served. All airlines can't serve the same territory without complete duplication. Some of them must be satisfied to be small and successful.

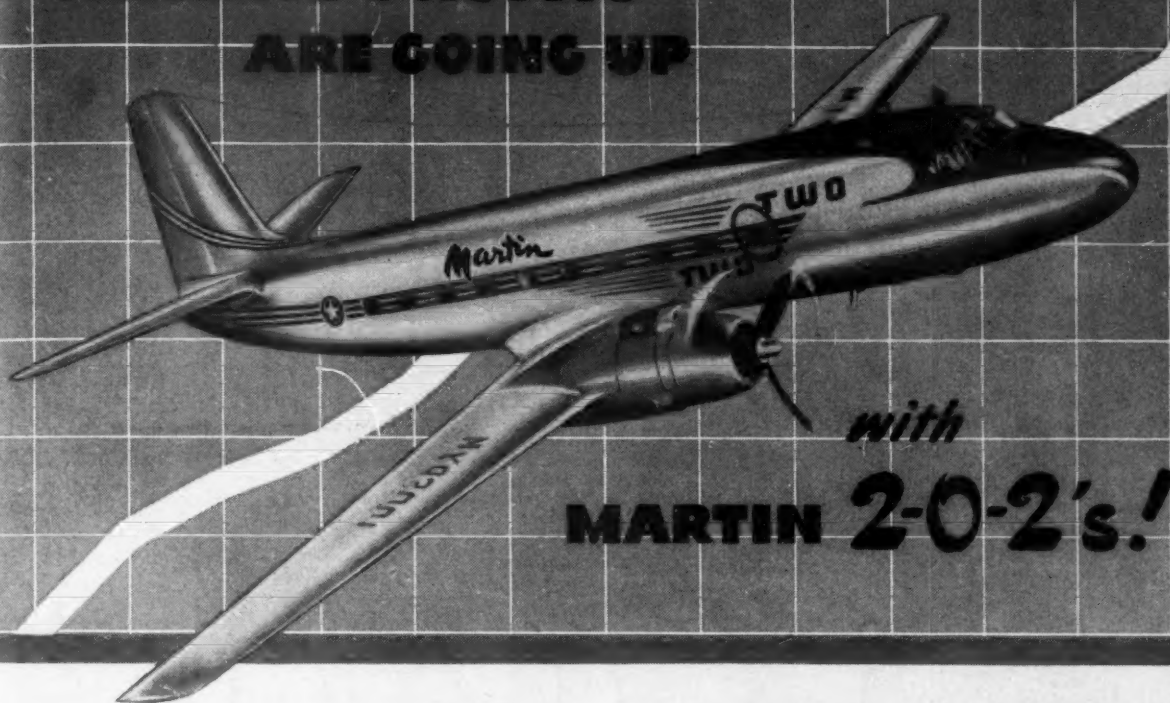
The big question now is: *Are we going to look at our own mistakes and go back and correct them, or are we going to continue to ask the CAB to give us something else we think we may want which may possibly remedy earlier mistakes?* This might only be

(Concluded on Page 18)



Voicing optimism, the author states that "a business which makes possible shrinking the United States and the rest of the world to a fraction of the distances measured in past relationships and which will therefore have a profound effect on the social and economic habits of all people, wherever they may be, cannot fail to flourish."

AIRLINE PROFITS ARE GOING UP



with
MARTIN 2-O-2's!

Martin 2-O-2 in Flight. Far surpassing predicted performance, Martin 2-O-2 is passing tests in record time. Pilots say: "... more get up and go than any non-military plane ... can't imagine any plane having more stability, directionally, longitudinally and laterally ... handles swell ... new airfoil design proving most successful!"

Here's Why:

Airline profits are going up—as fast as Martin 2-O-2 airliners go into operation. Because these great new Martin planes are bringing new economies ... and new profit opportunities. They reduce maintenance costs, increase payloads, build public acceptance.

No "paper plane," the Martin 2-O-2 is a flying reality. Full production is under way with all possible speed, assuring you of earlier delivery ... and Martin's large orders give you lower first cost. Since engineering, tooling and other first costs are spread over a larger number of planes, Martin's quantity production assures you of greater value per equipment dollar. And that's the reason why Martin transports are standard for leading airlines everywhere!

THE GLENN L. MARTIN COMPANY, BALTIMORE 3, MD.



Lower First Costs... result of Martin's quantity production assure greater value per equipment dollar ... and greater return from each dollar invested.



Ease of Maintenance on Martin 2-O-2 airliners cuts costs and turn-around time, means more hours of profitable operation per plane, means higher profits.



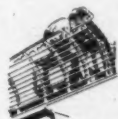
Passenger Comfort provided in Martin 2-O-2 airliners will leave passengers delighted, makes them eager for next trip, helps build public acceptance.



High Speed of Martin 2-O-2 airliners means higher return for each operating hour per plane, enables airlines to increase profits without raising overhead.



Larger Payloads result from greater seating capacity of Martin 2-O-2 airliners, further increase airlines' profits from each minute planes are in the air.



Now in Full Production, Martin 2-O-2 airliners will soon be rolling out to the country's leading airlines ... bringing them higher profits this year.

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MARCH 1947—PAGE 13



With the Arctic haze over Weeks Field, this view shows the CAA control tower, "bush" hangars, and the airstrip.

LAST FRONTIER

By WILLIAM J. GREEN

A glimpse of Alaska through the eyes of a traffic man

LIFE is often chilly north of the Aleutians, but for an airline traffic representative it is seldom dull.

Fairbanks, a town of 6,000 population, located 1,760 airline miles north of Seattle and 540 miles directly inland from Nome, is the hub of a great amount of Arctic flying, and the home of such famous "bush" pilots as Joe Crossen, Jim Dodson, and the Wien Brothers. Pan American, Alaska, and Canadian Pacific Airlines operate at least one scheduled flight to and from Fairbanks daily, and a great many itinerant and locally owned planes also add to the traffic.

As Fairbanks is a relatively small PAA station, there is little specialization; traffic personnel cover a wide variety of tasks and each day's work is different. Add to this a weather situation that may change 150° in six months, daylight that ranges from a hazy five hours in Winter to a sunny 24 hours in Summer, airports on which

it is not uncommon to see caribou, moose, and other animals, gold shippers that nonchalantly lay \$140,000 in dust on the express counter and leave without obtaining receipts, and passengers that haven't been "outside" since Seattle saw its first auto, and you have a cross-section of the reasons why Alaskan traffic work may be chilly but is seldom dull.

All-Round Work

Traffic personnel in larger offices in the States usually work continuously at a certain phase of traffic depending on their designation as traffic clerks, traffic representatives, airport clerks, etc.; and although we have such titles in Alaska, except for the district traffic manager, they are associated more with seniority and merit advances than with a specialization in type of work. The various duties connected with Traffic are usually rotated among the personnel, and the work any one person

is doing is more apt to depend upon his position in the cycle than on his rank or classification. A senior passenger clerk, a traffic representative, and a traffic clerk may each do the same amount of sales promotion, ticketing, and express and baggage handling in any period of time.

To show a typical rotation or cycle we will arbitrarily break Fairbanks traffic work into departures, arrivals, office, and reservations shifts, remembering that there is actually considerable overlapping of duties and that any individual traffic man may work some part of all shifts in any single working day.

When handling departures Traffic checks to see whether the day's flight plan has been altered and notifies passengers if it has. The post office is notified of the time to have outgoing mail ready, and express manifests are checked. Because the planes stop at Whitehorse, Yukon Territory, and Port Hardy, British Columbia, the flights

are international, and clearance and entry forms are prepared for United States and Canadian Customs and Immigration officials. Mail, baggage, and express are loaded on an exact poundage basis, and weight report is prepared to be checked against space available when final weights are known.

Most of the predeparture work so far explained is done at the downtown business office, and the traffic man then takes a company truck to the city airport about a mile away where passengers check in 30 minutes prior to departure. Baggage is then weighed, flight coupons are lifted, and cab and hotel information (a service peculiar to Alaska) is obtained for accommodations desired at destinations. There are always a number of last-minute things to be done: mail weights and destinations shown on postal receipts are compared with those shown on company reports; in cold weather perishable express is loaded just before compartments are sealed; company mail is sorted and put aboard; customs seals are checked, and the captain's signature obtained for flight clearance papers; and, finally crew and passengers are put aboard and flight papers stowed. Cab and hotel messages are then composed and sent via teletype to line stations, and the load message is checked with the dispatcher.

Busy Airport

Arrivals are for the most part completed at the airport. Cab and hotel arrangements are made according to prearrival messages, and immigration, customs, and agricultural (all United States) officials are notified of arrival time to be present when passengers deplane and customs seals are broken. Clearance and entry forms are inspected as is any baggage which has originated at a foreign station or passed through foreign territory in unsealed compartments, and although maintenance and airways personnel are responsible for unloading the plane, Traffic checks in severe weather to see that cut flowers and other perishables are brought inside immediately. Express manifests and incoming mail receipts are checked and live express such as baby chicks is either delivered or adequately cared for.

The office shift gives each person an opportunity to do additional sales promotion and general administrative work, and is one of the advantages of working at a small station. Contacts are made for future passenger and express business, and personnel are better able to keep informed of events of importance to the company. There is no Railway Express Agency delivery

service locally from one form of transportation to another or from one company to another, and the office shift along with the others sees that express is checked and properly delivered for on-carriage. This shift also checks to see that all local consignees are notified by phone or mail and is responsible for all counter work when arrivals and departures keep other personnel at the airport. All personnel are responsible for completing the billing and manifesting necessary for originating express, but the office shift checks to see that each day's accumulation is shipped.

Reservations consists of one person who receives and sends teletype messages, handles all flight panels, answers correspondence, takes telephone calls, and at times tickets passengers. This department is specialized in that one person usually works reservations continuously for a given period, but complete handling of the entire reservation procedure gives a diversity to the one person which is seldom found in larger offices. Other traffic personnel take turns filling in on the regular reservationist's days off, usually working about two days a month in this capacity. This keeps all traffic personnel abreast of developments in reservations, and by completely rotating the reservationist into Traffic at regular intervals the entire staff is kept well informed of all sections.

Conditions under which the work is accomplished will vary even more than the work itself. In the Summer the planes land in sunlight at almost any hour, and Traffic meets them in a light khaki uniform that is uncomfortably warm no matter how thin. Passengers may see the famous night ball games that are played by natural light at



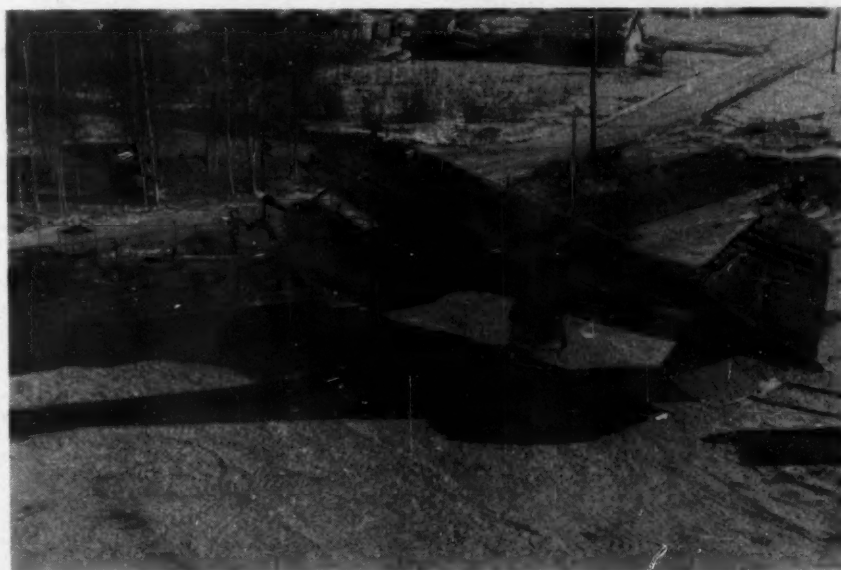
William J. Green

midnight, or they may play a midnight round of golf at the new country club grounds. The swimming pool is always open and crowded, and Fairbanksans may be seen cultivating their gardens or mowing lawns at 1:00 a. m.

Winter Operations

In the Winter the planes normally land during one of the 19 hours of darkness, or at best in the cold haze of an Arctic day, and Traffic meets them with overshoes, parka and fur gloves over the heavy regulation navy uniform. Passengers hurry inside the waiting room and Traffic checks to see that baggage and perishable express are brought inside immediately before anything freezes. Heated cabs provide service from the airport, and most activity takes place indoors. The swimming pool cannot be used even for

A PAN AMERICAN DC-3 ready for a flight from Fairbanks to Nome.





View of Dodson, Wien and Alaska Airlines' hangars east of the Weeks Field airstrip.

ice skating since the air is so cold that the skater would soon find his lungs severely frozen, and golf links, garden spots, and lawns are all securely locked under a cover of crusted snow.

Even wild animals step in to plague the life of an Alaskan traffic man. Each gallon of gasoline carried cuts payload by six pounds, and the planes must load sufficient fuel to take them to destination plus a reserve to fly an additional 45 minutes or to their nearest alternate. But any plane using Big Delta or a number of other fields as alternates may also need to carry a reserve in addition to the normal 45 minutes supply because herds of buffalo, reindeer, caribou, and moose frequently migrate onto the airstrip, closing them to all traffic.

The air express work also brings its own peculiar problems and solutions. Alaskan air shipments are predominantly Northbound, and one of the airline's greatest problems is to develop greater backhaul poundage. Fur and gold shipments present the greatest opportunity for this development, and considerable effort is made to cater to the business. Because of the

complete service offered it is not unusual for companies to bring a season's work in at one time and lay \$40,000 in furs or \$140,000 in gold on the counter, give shipping instructions, ask that a copy of the bill be mailed them, and leave without obtaining any form of receipt. This leaves traffic feeling much more worried about the shipments than are the actual owners.

Most Alaskans love to travel, and plans are under way to give them much faster service from all of Alaska to any part of the world. However, the territory has just begun to feel the impetus of air transportation; and when a Seattle-bound passenger remarks that the last time he was "outside" the trip took 91 days (10½ hours flight time at present), Seattle's largest building was all of four stories tall, sailing ships filled the harbor, autos were unheard of, and even buggies were scarce—the traffic man suddenly realizes that he is working in Uncle Sam's last real frontier. And thinking of the Sourdough going "outside" for the first time in 60 years, he wonders how he would react to the world of 2007 if he were to move into it tomorrow.

PIA Picks Bradley Field As United States Base

Peruvian International Airways has completed arrangements for using Bradley Field, near Hartford, Connecticut, as its major northern operations and maintenance base.

The airline will use the field for overhaul and maintenance work on its DC-4 transports flying between Lima and Montreal. Five buildings at the field will be utilized by PIA which intends to move its Operations Section to the base. It is expected that facilities will be available at the field for overhaul of the planes as well as for servicing and repair on the company's transports. Arrangements are being made for commissary facilities at the field in connection with the servicing of the planes.

Peruvian will inaugurate scheduled air transport service for passengers, mail, cargo and express this month, operating over a 4,000-mile direct route between Lima and Montreal. President and general manager is Lieutenant General Harold L. George, until recently Commanding General of the United States Army Air Transport Command.

National Claims Air Freight Mark

A new record for domestic and international air freight shipments out of New York on a scheduled basis is claimed by National Airlines. According to Thomas A. Prevost, assistant vice president in charge of the New York region, National carried over 100,000 pounds of air freight from New York to Jacksonville, West Palm Beach, Miami, Tampa, New Orleans and Havana during the month of February. The February total, Prevost declared, represented a 100 percent increase over air freight shipments for January.

Cairo Now Served By Trans World

Trans World Airline Constellation service has been extended to Cairo. TWA's regular Friday New York-to-Rome flight now continues to Cairo, and the twice-weekly Wednesday New York-to-Athens trips also terminate at the Egyptian capital.

Fairchild Development Speeds Paracan Drops

The prototype of an automatic monorail system, capable of releasing 15 standard 350-pound Army paracans in only eight seconds, has been designed by Fairchild Aircraft engineers.

Now installed on a C-82 *Packet* the monorail is scheduled to go soon to Wright Field for extensive operational tests by the Air Materiel Command. It is expected that henceforth all *Packets* delivered to the Army Air Forces will be equipped with the new device.

Fast, efficient, quick to load and easy to operate, the unique delivery system will enable an AAF *Packet* to drop, in a single operation, thousands of pounds of supplies and equipment, plus its normal complement of 42 paratroopers.

The monorail consists of an aluminum extruded beam extending along the ceiling at the center line of the cargo hold. Suspended from this beam are trolleys which



A Ninth Air Force *Packet* delivers its load of supplies and equipment over a target area, with the aid of a new automatic monorail.

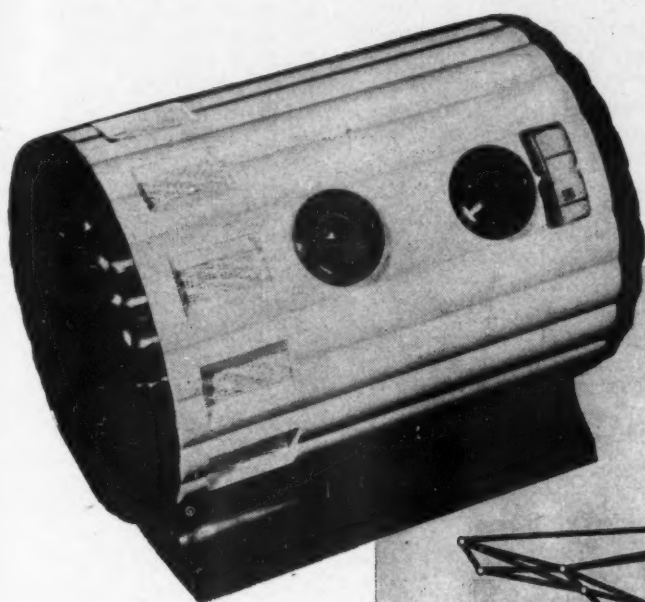
are actuated by an endless, electrically operated cable. This cable carries the paracans to a "tripper" directly over the paratainer door in the belly of the fuselage, where the paracans are released. As each bundle falls from the plane, its parachute is automatically opened by a rip cord attached to a static line in the ceiling of the cargo hold. The bundles are interconnected by a webbing tape of a fixed length, causing them to fall in a close pattern on the ground. When all the paracans have been released, the paratainer doors close, and the system is ready for reloading.

The new aerial delivery system is operated by a push-button at the jumpmaster's station, which opens the paratainer doors, unlocks the paracan lock system, and starts the cable actuating motor. The system may also be operated from the pilot's overhead control panel, or, in emergencies, controlled manually. Red and green signal lights, operated from the flight deck, are installed on the jumpmaster's panel. The red light indicates the approach of the target and is followed by the green when the target has been reached.

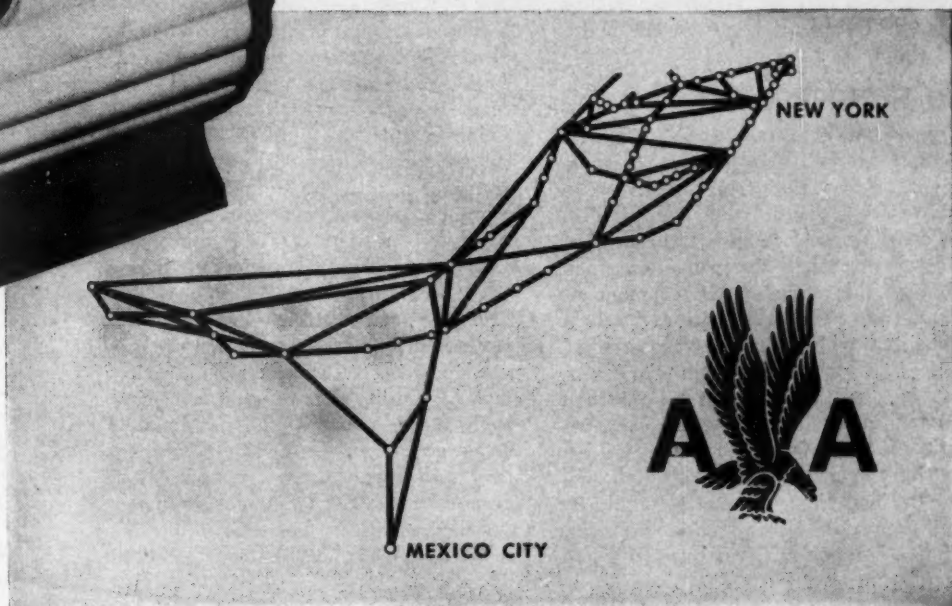
Jason Electronics Company, Inc.

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with **AMERICAN AIRLINES** *Airfreight*



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TO DERIVE the benefits made possible *only* by swift, dependable air shipping, products of Jason Electronics Co., Inc., of Brooklyn, N. Y., go via time-saving American Airlines Airfreight, direct to the airport in Mexico City. Delivery is made to points of sale in one-fifth the time required by fastest surface shipping. Result: Jason holds a leading position in the race for lucrative Mexican markets.

Jason has discovered shipping via American Airlines Airfreight results in many other advantages. Sales are increased with established customers because of rapid stock turnover . . . and more and more new accounts turn to Jason as an alert and reliable source of supply. They find, too, that the regular use of Airfreight lends a new prestige to both the house of Jason and its products. And when all cost factors are considered, Jason has found Airfreight actually more economical than slower forms of transportation.

For details on how Airfreight can help your business, call your nearest American Airlines office or write to American Airlines, Inc., Cargo Division, 100 East 42nd Street, New York 17, N. Y.

Day of Reckoning

(Continued from Page 12)

a case of piling mistake on mistake and lead to final chaos in the industry.

The period we are now passing through is a day of reckoning. False impressions were created by war operation, including the mistaken idea that we could expect unreserved public acceptance before we could complete perfection of our product. We can look at this experience, in a way, as a most fortunate occurrence. The public can be assured that airline management will be more realistic in considering the immediate problems and in correcting the mistakes of the past.

The basic difference of opinion between the conservatives and the enthusiasts in no way involves the extent of ultimate future of air transportation. The difference is strictly in the matter of timing.

Right Products

I believe that regardless of the potential market, the product must be right. Today the public wants safety above all. They do want dependability of schedule performance and regularity of service, but when we advise them that at this stage of development we cannot offer that regularity and still be consistent with safety, they are satisfied.

Now, why am I so optimistic concerning the ultimate future of air transportation? It is because now, as a result of wartime development, we are getting the specific facilities which offer for the first time a potential regularity and dependability of service regardless of weather that will compare with surface transportation. The inability to fly at very high altitudes, with fuel supply to deviate substantially from bad weather areas, now causes cancellation of flights when unfavorable weather conditions develop en route.

Postwar airplanes are being delivered today with pressure cabins that will permit airplanes to fly at high altitudes over bad weather areas and yet will insure complete comfort to crew and passengers. Heat type anti-icers, advanced by the necessity of ferrying planes across the North Atlantic during the war, will make possible safe flying through icing conditions. Long-range gasoline supplies will permit deviations around storm areas.

Cancellation of flights at terminals results from low ceilings and inadequate visibility. The human pilot can do an excellent job in bringing an airplane down to a general airport location with accuracy. However, he does require proper ceiling and visibility to make final observations during his approach for final landing. Today the

development of the automatic landing pilot, identified by the layman as the electronic pilot, will permit the entirely automatic landing of an airplane.

Mechanical devices need checks and double-checks. The ground control approach system, a type of radar, will permit observation of the plane by monitors on the ground to avoid any discrepancy in course which might result from maladjustment of a mechanical device. In addition, there is the opportunity for the installation of radar on the ground for general observation of all airplanes in any particular sector. Finally, with airborne radar in the airplane itself, there is the opportunity for the pilot to make ground observations through overcasts.

These are not speculative possibilities. They represent the major contribution from all the technical development forced by war. But no airline is going to start to use all this equipment immediately. There will come first the training, installation of proper ground equipment, and an adequate test period of flying present weather minimums with the mechanical devices to insure their reliability.

These devices, which are being installed on airplanes on which we are now receiving delivery, can be a reality and in routine operation in not more than three years if the preliminary steps are taken properly. Meantime, they will make their contribution to greater safety and regularity under present conditions, but their full effectiveness will be felt in from three to five years.

Ground Progress

Construction of ground facilities is moving much faster. We hope that by the midsummer much of hangars, buildings and other plant facilities will have been completed and in use. Airport construction and improvement has been decided upon in practically every strategic city in the United States. All this work is on the move.

One other thing we will do immediately will be the establishment of more practical schedules, planned for the maximum convenience of the traveler. We must sacrifice some utility of equipment to give better service. For example, adequate reserve airplanes must be stationed at points to minimize delays which might arise from minor mechanical difficulties. Instead of basing airplane schedules on the maximum cruising speed of the airplane, we will set schedules so that the pilot will have the opportunity to make up lost time by a more flexible use of reserve power.

If the airlines themselves will benefit from the lessons of this past period and be more conservative in their future expansion and show a little patience in waiting for increased volume to justify such expansion, I would say that this industry is "over the hump." We have all learned valuable lessons and we are making use of them.

A business which makes possible shrinking the United States and the rest of the world to a fraction of the distances measured in past relationships and which will therefore have a profound effect on the social and economic habits of all people, wherever they may be, cannot fail to flourish.

We are just passing through a shake-down period. Rather than viewing this period with pessimism, I look upon it as an experience that will make air transportation stronger and greater than any of our earlier expectations.

AIR TRANSPORTATION Books

OPPORTUNITIES FOR ESTABLISHING NEW BUSINESSES IN AVIATION—Prepared by Richard A. Rush under the direction of H. B. McCoy, director of the Office of Domestic Commerce (United States Department of Commerce; 236 pages; 40 cents). A well-balanced book covering the whole field.

THE OFFICIAL PICTORIAL HISTORY OF THE AAF—By the Historical Office of the Army Air Forces (Duell, Sloan and Pearce, 270 Madison Avenue, New York; 213 pages; \$10.00). An impressive photographic history of military aeronautics from the balloon right through the Superfortress. Good stuff.

THE BRITISH PEOPLE—By G. D. H. Cole and Raymond Postgate (Alfred A. Knopf, 501 Madison Avenue, New York; 600 pages; \$5.00). Revised and enlarged edition covering the years 1746-1946. This book first appeared in 1938.

INTRODUCING BRITAIN—(Macmillan Company, 60 Fifth Avenue, New York; 160 pages; \$2.00). Thirteen writers contribute to give an over-all picture of Britain. Striking photos.

CALIFORNIA, AN INTIMATE GUIDE—By Aubrey Drury (Harper and Brothers, 49 East 33rd Street, New York; 592 pages; \$4.00). The history, geography, points of interest, and personalities of a great state. Interesting photos.

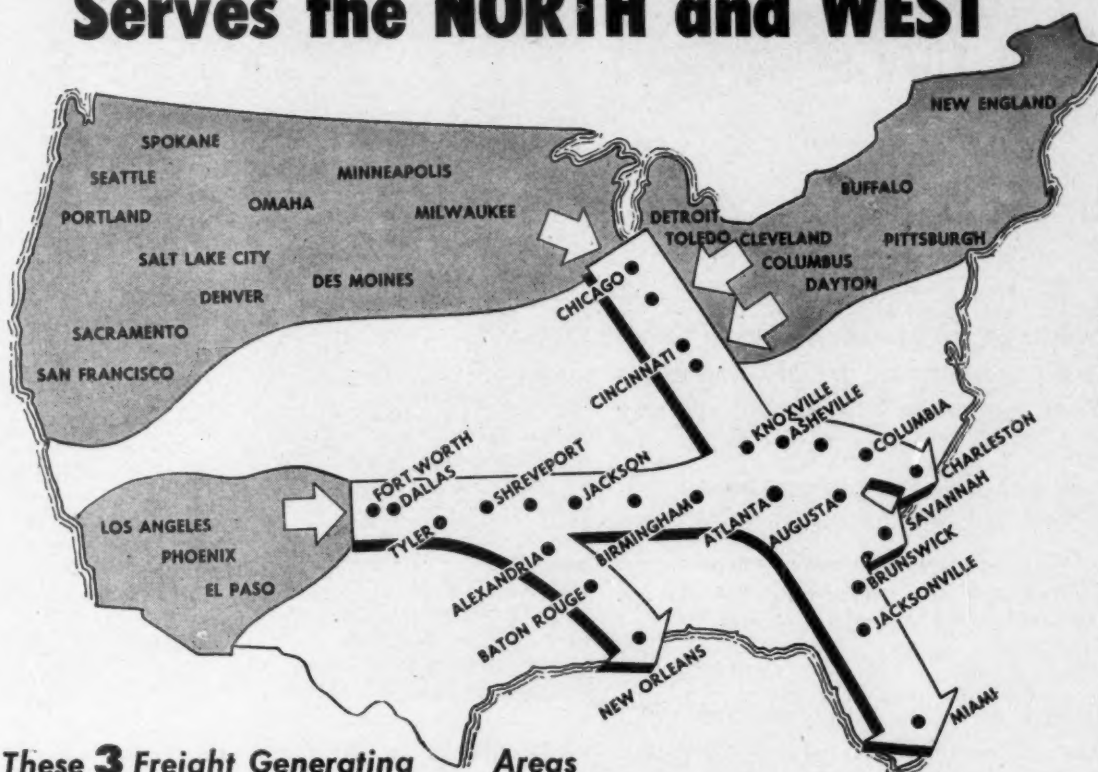
MAMA TOOK UP TRAVEL—By Kenneth Horan (Doubleday & Co., Inc., Garden City, New York; 216 pages; \$2.00). Another book about the gay Ingham family. You'll like it.

INDIAN ROUTE MARCH—By Louis Hagen (Pilot Press, 41 West 47th Street, New York; 192 pages; \$2.50). An "outsider's" impression of a country which has baffled us for centuries. Many interesting sidelights.

MANHATTAN KALEIDOSCOPE—By Frank Weitenkampf (Charles Scribner's Sons, 597 Fifth Avenue, New York; 290 pages; \$2.75). Seventy-five years covered in genial style. Plenty nostalgic.

PORTRAIT OF LATIN AMERICA—Edited by Anne Lyon Haight (Hastings House, 67 West 44th Street, New York; 180 pages; \$5.00). The book takes its title literally. Bilingual text. Impressive art work.

How DELTA AIR FREIGHT Serves the NORTH and WEST



These **3** Freight Generating Areas
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Delta
AIR LINES

General Offices, ATLANTA, GA.

What Air Freight Carriers Can Expect From New York's Glamor Industry

The fourth in a series of articles based on an important survey of the air freight potentials in New York's women's apparel industry

New York-manufactured wearing apparel given an unusual send-off by that popular eyeful, Chili Williams.



By Colonel L. H. Brittin • Bertram Ault • Dr. Roger Mayhill

FASHION SHOES

Although New York manufactures only about two percent of the total women's shoes produced in the United States, it is the center of the fashion shoe industry. Various spokesmen for the industry have estimated New York's share in the national production of fashion shoes as ranging between 50 to over 90 percent. This is accounted for by difference in definition. The low estimate of 50 percent was based on shoes retailing at \$10 a pair and over, while the high estimate of over 90 percent was based on shoes retailing at \$12.95 a pair and over. It was agreed that production of fashion shoes in New York City amounts to about five million pairs a year.

The fashion shoe industry is somewhat scattered, but the bulk of it in Manhattan is concentrated between 4th and 14th Streets, east and west of midtown. A considerable portion of the industry is located in Brooklyn, and some factories may also be found in Long Island City in the Borough of Queens.

In recent years, there has been added emphasis on style in shoe design. This

increasing style tie between dresses, shoes and accessories is necessitating closer cooperation among the manufacturers of different stylized merchandise. This not only pertains to design but to shipping dates, so that style ensembles reach their destination at the same time for promotional and advertising activity. While these type shipments may take immediate advantage of air carriage it was felt that for sustained shipment by air, the rate level is very important. The bulk of these type shoes are presently shipped by Railway Express, and it was felt that at a competitive rate air freight could capture a very substantial portion of this traffic.

Manufacturers of stylized shoes do not maintain stock but work solely on order. Shoes are shipped as soon as a sufficient quantity is accumulated for shipping in standard size cartons. Formerly there were two buying seasons a year—Spring and Fall. It was the practice for retailers to buy for four or five month requirements and then to place follow-up orders as their needs dictated. Manufacturers are now attempting to eliminate seasonal buying by spreading the buying seasons over

five periods a year instead of the former two. Adoption of this plan would enhance the value of speed considerably and should boost the use of air freight.

The usual retail store keeps two lines of high-priced shoes. Although it is unusual for more than two lines to be kept by any one store, some of the largest department and ready-to-wear stores specializing in the better class of merchandise carry up to six lines of high-priced shoes. Usually, a store receives less than 300 pairs a month of any one line.

One manufacturer stated that he was concerned with the problem of sporadic shipments. He felt that manufacturers and retailers should get together and consolidate their shipment. This, in his opinion, would enable the transport agencies to operate more efficiently and would permit of lower transportation rates.

Shipments to Florida present a problem to the manufacturer. Deliveries of shoes, which are mainly of the white variety, are concentrated in the months of November and December. This results in manufacturing white shoes at the same time as the regular Winter

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FRENCH NATIONAL AIRLINES 24 State Street, New York 4

shoes and necessitates special efforts to prevent the white dyes from spoiling the dark winter shoes and vice versa.

Two typical sized cartons used by the industry contain 36 and 48 pairs of shoes. The dimensions and average weights are as follows:

36 pairs—22"x26 1/4"x18 1/4"—54 pounds
48 pairs—25"x25"x22 1/4"—72 pounds

ESTIMATES OF POTENTIAL

The methods employed in estimating the potential movement by air of women's apparel merchandise from New York to the San Francisco-Oakland and Florida areas were developed as the study progressed. Originally the same method employed successfully in the Detroit survey¹ was attempted in the New York area. This consisted of sending questionnaires to a list of manufacturers in basic industrial groups asking how many pounds of merchandise in an average month would be shipped by air to the two destinations at specified rates and service conditions. These lists were furnished by various chambers of commerce and trade associations. In all, some 15,000 questionnaires were distributed throughout the New York metropolitan area including Northern New Jersey.

Whereas a response better than 25 percent was achieved in the Detroit survey the response from the apparel group in the New York area was so limited as to be practically valueless for the purpose of the survey. Investigation soon revealed the reasons for the poor showing. First of all, the manufacturer of apparel was in most cases indifferent to the manner in which his merchandise was shipped since the consignee paid for the shipping and designated the transport agency. Secondly, the manufacturer had been deluged by wartime Government questionnaires and had built up a resistance to them. Thirdly, the manufacturer was harassed by OPA controls and restrictions, and by shortages of labor materials in the face of the greatest demand in history. Confronted with these prob-



Models Doris Stevens (left) and Doris Wallstrom display their newly fashioned frocks which are sped to nation-wide markets via United Air Lines' air freight service.

lems the manufacturer had neither the time nor the patience to give an intelligent answer to the information requested.

After the questionnaires were analyzed, a new approach was formulated. Personal interviews were held with industry spokesmen representing trade associations and leading manufacturing establishments from whom informed opinion was obtained regarding the economic characteristics of their respective industries relative to air freight. Consignee reaction to such a service was obtained by a West Coast representative who, with the cooperation of the Chambers of Commerce of San Francisco and Oakland and the Bay Area Aviation Committee, compiled a list of the better apparel and department stores in the area, circulated a questionnaire among them and followed up with personal interviews. A special questionnaire was also sent to a selected list of department and apparel

stores in the key cities of Florida.

In the absence of traffic-flow data the authors devised a method by which to construct the pattern of apparel merchandise flow, by type of apparel, from the New York area to the two areas under consideration. This consisted essentially of a critical analysis of the voluminous material compiled in the Census Volumes of Manufactures and Retail Distribution, buttressed by informed opinion, questionnaire returns, and the latest available statistics.

By a combination of these methods and sources of information it has been possible to arrive at a quantitative estimate of the potential volume of women's apparel which is likely to move by air from the New York metropolitan area to the San Francisco-Oakland area and the key cities of Florida, predicated on rate levels and service standards to be discussed.

The estimates which follow are based on a rate level of 10 to 14 cents a ton-

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mile. This rate represents the findings of a study analyzing Douglas C-54A costs on a contract type of operation. At the time of this writing, several contract carriers are offering rates of 20 cents a ton-mile using Douglas C-47 equipment and there appears to be a marked tendency for rates to gravitate to the level set in this study.

In addition, new transport types not yet in commercial operation such as the Fairchild C-82, Boeing C-97, Douglas C-74 and the Burnelli, UB Flying Wing type series, indicate the possibility of an even lower level of rates. On the basis of these considerations the rates of \$15 per hundredweight to San Francisco-Oakland and \$6-\$7 per hundredweight to key cities of Florida were established for purposes of this study.

It is important to note that these rates are almost equal to present Railway Express rates, which are \$13.50 per hundredweight to San Francisco-Oakland, \$6 to Miami, and \$4.79 to Jacksonville. At this rate level, air freight is directly competitive with Railway Express, and under similar service standards can be expected to capture substantially the entire volume of apparel traffic presently moving by Railway Express between distances greater than 500 miles. Admittedly a

cut in REA rates would change the competitive conditions and create a new balance in the division of traffic.

While the scope of this study does not permit exploration of this interesting question it is well to point out that there is presently before the Interstate Commerce Commission a petition by the railroads to increase by 25 percent the level of freight rates. Implications are that an upward revision of Railway Express rates is included in this petition. A granting of this increase of rates by the ICC can be expected to accelerate the diversion of REA traffic to the air freight carriers.

SERVICE STANDARDS

From samplings of informed opinion and prospective shippers it is strongly evident that standards of service rank in almost equal importance with rates as selling points for air freight. The following comment received on a returned questionnaire from a department store sums up the consensus of opinion admirably:

"Safer handling (we cut out broken article damaged goods 85 percent by using Railway Express), cleanliness of delivered packages, care in handling, delivery to door, promptness of claims for damage (never over two weeks) and service rendered by REA will have to be matched, as well as rates competed with, to get much of their (REA) business."

In an article in *Women's Wear Daily* of February 21, 1946, Paul J. Phelan, Traffic Manager of Interstate Department Stores, wrote that airlines will have to pattern their operations somewhat after those of freight forwarders and coordinate their services with trucking companies to achieve the kind of freight transportation needed by department stores. He further stated that air freight should be so organized that merchandise can be dropped off at a freight terminal and then picked up by trucks for store-door delivery within a radius of several hundred miles.

Regarding the problem of pilferage it was stated that careful supervision of planes and good motor carriers for store-door deliveries should mean no greater losses than experienced by other carriers. "If we set up a projected claims reserve we should not have to set up something on top of that just to cover the airlines," he emphasized.

PAA to Serve Fiji Directly

Permission has been granted to Pan American World Airways for direct service between the United States and Fiji. Clippers operating out of San Francisco will pick up and discharge passengers and express at Suva, the Fiji capital, six times monthly.

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Newark - JACKSONVILLE - 12.43 CWT.
New Orleans - MIAMI - 9.78 CWT.



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NATIONAL AIRLINES

ROUTE OF THE BUCCANEERS

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COAST-TO-COAST public relations broadcast series has been inaugurated by the **Air Transport Association**. It is a five-minute transcribed program, sponsored locally in approximately 300 cities, featuring **John W. Vandercook** as commentator.

Trans-Canada Air Lines has increased its passenger accommodation in the Canadian Maritime Service with DC-3s, replacing **Lodestar** equipment.

Capital Airlines has adopted a new company insignia. It was created for the system's twentieth anniversary. The design, blue and gold, is that of a bird in flight with a ring of five stars extending from head to wingtip.

General Harold L. George, president of **Peruvian International Airways**, recently was appointed to the **Hochschild Fellows Committee** of the **American University**.

William P. Redding, former executive vice president of the **National Aeronautic Association**, died last month at the **Mayo Clinic** in **Rochester, Minnesota**.

During recent current fleet exercises in Caribbean waters, a **Sikorsky** helicopter, operated from the aircraft carrier **U. S. S. Franklin D. Roosevelt**, rescued six Naval airmen from the water during 10 days.

Stockholders of **The Aviation Corporation** will be asked to approve a change in the name of the company to **Avco Manufacturing Corporation** at their annual meeting this month.

Republic Aviation and **American Airlines** last month announced that their contract for the production of 20 **Rainbows** had been terminated by mutual agreement.

Avianca (**Aerovias Nacionales de Colombia**), Colombian affiliate of **Pan American World Airways**, has inaugurated scheduled flights between Colombia and the United States. The route connects **Bogota** with **Miami**, with one stop at **Barranquilla**.

EASY TO OPEN



Showing how simple a matter it is to open this new-type door for a DC-3 transport, designed by **Ernie Code**, operations manager of **West Coast Airlines** (right), is **Herbert A. Munter**, executive vice president of the company. A single flight attendant can open the door from the inside, and it can be opened from the outside as well.

Plans have been formulated for the establishment of a **New Jersey chapter** of the **National Flying Farmers Association**. An air attack on insects is planned for the Spring.

A **British** jet plane, the **Vampire**, recently reached an altitude of 51,200 feet in a routine test flight. It was piloted by **Wing Commander John Baldwin**.

Ernest A. Cutrell, an **American Airlines** captain, has received the **Octave Chanute Award** of the **Institute of Aeronautical Sciences** in recognition of his work in the development of instrument landing systems.

The **Frank M. Hawks Memorial Trophy** has been presented to **Igor I. Sikorsky** in recognition of his development of the helicopter. Previous winners were **Fiorello H. LaGuardia**, **William P. Lear**, **Thomas H. Beck**, **Admiral Charles Rosendahl**, **Roy W. Howard**, and **Arthur Hays Sulzberger**.

It is reported that helicopters are being seriously considered to provide transportation for **United Nations** diplomats directly to and from the projected **UN capital** in **New York**.

Establishment of a **European division** to provide technical liaison with overseas airlines and to expedite their procurement of spare parts has been announced by **Douglas Aircraft**.

The third annual **Philadelphia forum** of the **American Helicopter Society** will take place on **March 27-29**. Programs of the meeting may be obtained from **Paul Thomas**, 12 South 12 Street, **Philadelphia**.

The **AAF** is completing a climatic hangar at **Eglin Field, Florida**, where men, aircraft, and equipment will undergo tests at **Arctic temperatures** of 70 degrees below zero.

Flight Operations, Inc., which will specialize in directing national and regional demonstrations and expositions, has been organized. Managing director is **Tom Compere**, former day city editor of **The New York Herald-Tribune** and aviation publicity director of the **General Electric Company**; **James C. Ritter** is operations consultant. Headquarters of the firm is at 154 **Nassau Street, New York**.

Pratt and Whitney Aircraft Division has broken ground for the first unit of a proposed multi-million-dollar gas turbine laboratory in connection with its program of gas turbine engine research and development.

A new five-cent air mail stamp, red in color and the same size as the ordinary stamp, will be placed on sale on **March 26**.

KLM has given its second reorder for **Constellations**. The airline originally ordered four of these aircraft, reordered seven, and the present order for two will bring the total to 13.

Articles weighing up to four pounds six ounces are now accepted for dispatch by air to the **Philippines**. The air mail rate is 25 cents for each half ounce or fraction thereof.

An air transport agreement has been concluded between the **United States** and **Siam** on lines similar to those previously entered into between this and foreign governments.

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Type M-2	Leece-Neville	50 Amp., 24V P/N S24225	112.50
Type O-1	Leece-Neville	100 Amp., 24V P/N S24250	112.50
Type E-7A	Leece-Neville	50 Amp., 12V P/N 24500	56.25
Type L-3	Leece-Neville	25 Amp., 24V P/N S24504	112.50
Type M-2	Eclipse	50 Amp., 24V P/N 718-1-A	112.50
Type O-4	Eclipse	100 Amp., 24V P/N 128250-901-9	112.50

STARTERS

			Net
Type JH3R	Jack & Heintz	24 Volt P/N 280R3	\$150.00
Type JH5LR	Jack & Heintz	24 Volt P/N 1760R3	247.50
Type H-6	Eclipse	12 Volt P/N 444-4F	168.75
Type J-1	Eclipse	24 Volt P/N 756-21B	97.50
Type G-6	Eclipse	24 Volt P/N 915-4F	168.75

MAGNETOS

			Net
Type SF14LU7	American Bosch	P/N MJN-14K-301-R1830 Engine	\$112.50
Type SF14LUS	American Bosch	P/N MJN-14K-307-R1830 Engine	112.50
Type SB9RN	Scintilla	P/N 2-953-3-R-985 & R1340 Engine	75.00
Type DFN	Scintilla	P/N 10-8038-15 Lycoming R-680 Engine	75.00
Type SF14LN-3	Scintilla	P/N 10-15364-21-R1830 Engine	112.50
Type SF9LN4	Scintilla	P/N 10-20700-1-R1820 Engine	112.50
Type VMN7DF5	Scintilla	P/N 10-21819-2-R755-830-915	56.25

PROPELLERS

			Net
Hamilton Standard Propeller Assembly		P/N 23E50-473-6477AO	\$899.50
Hamilton Standard Propeller Assembly		P/N 2D-30-233-6101A-12	420.00

BLADES

			Net
Hamilton Standard Blade Assembly		P/N 6339A-12	\$225.00
Hamilton Standard Blade Assembly		P/N 6353A-12	225.00
Hamilton Standard Blade Assembly		P/N 6353A-18	225.00
Hamilton Standard Blade Assembly		P/N 6477AO	112.50
Hamilton Standard Blade Assembly		P/N 6507A-O	262.50

GOVERNORS

			Net
Hamilton Standard Governor Assembly		P/N 1A2G5	\$150.00
Hamilton Standard Governor Assembly		P/N 1A4G5	150.00
Hamilton Standard Governor Assembly		P/N 1M12G	75.00
Hamilton Standard Governor Assembly		P/N 4G8G23D1	150.00
Hamilton Standard Governor Assembly		P/N 4G8G23G1	180.00
Hamilton Standard Governor Assembly		P/N 4K11GOJ	150.00

IGNITION HARNESS

			Net
Breeze	Manifold Assembly	P/N E-1028-67-10	\$48.15
Breeze	Manifold Assembly—R1820	P/N E-667-4P-AN	75.00
Breeze	Ignition Assembly—R975-11	P/N E-616-4P-AN	25.50

IGNITION HARNESS (Cont.)

			Net
Titeflex	Manifold—R2800	P/N 22450	\$187.50
Titeflex	Harness—R2000	P/N 22922	150.00
Titeflex	Conduit Assembly	P/N 28007; -08; -09 each	6.77

FLIGHT INSTRUMENTS

			Net
Sperry	Gyro Horizon—Type AN5736-1A	P/N 656768	\$51.10
Jack & Heintz	Gyro Horizon—Type AN5736-1	P/N 6500-A	51.10
Jack & Heintz	Dirac. Gyro—Type AN5735-1	P/N JH5500	38.50
Pioneer	Altimeter, Sensitive 0 to 3500 ft.	P/N 1536-28-B	24.00
Kollsman	Altimeter, Sensitive	P/N 671RK01-1692	24.00
Pioneer	Compass	P/N 1818-4A	14.50
Kollsman	Pitot Tube, Type AN5816-1	P/N 309D-011	4.90
Pioneer	Airspeed, Type B-8, 20 to 200mph.	P/N 1426-21-A1	15.00
Pioneer	Rate of Climb, Type C-2, AN5825-1,	P/N 1636-6H-B1	21.00
	0 to 6,000 ft. per min.		

NAVIGATION INSTRUMENTS

			Net
Fairchild	Sextant; Bubble type A10A		\$27.50
Link	Sextant; Bubble type A12		27.50
Astro Compass—AN5738-1			7.70
Compass—Navigation Type D-12			25.00

ENGINE INSTRUMENTS

			Net
Fisher-Porter Flowmeter—P/N C1006 for PBY			\$49.00
Kollsman Manifold Pressure Gage—Single 611KN-02			
	Range 10 to 50 in. of mer.		14.00
Manifold Pressure Gage—Dual, AN5770-2-12			
	Range 10 to 75 in. of mer.		19.80
Manifold Pressure Gage—Dual, AN5570-1			
	Range 10 to 50 in. of mer.		11.00

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Elec. Lab. Inc.	12 Volt P/N S659		18.00
Holtzer-Cabot Elec. Co.	Type MG149F—Rotary type		
	24V to 750V P/N 25258		77.00

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Bosch	Coil Induction Vibrator 24V P/N VJR24B5X		8.00
Eclipse	Solenoid starter 12V P/N 126701-1		6.94
Elec. Spec. Co.	¼ HP Motor 24V Type HCA3 P/N 7535A		101.00
Leach Co.	Relay 24 Volt DC P/N 5058		10.00
Leach Co.	Relay 24 Volt 200 Amp. P/N 7220-24		10.48
Westinghouse	Voltage Regulator finger type		
	24V 200 Amp. P/N 1248275B		30.00
Mallory & Co.	Noise Filter		15.00

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P/N RT52143	8.75
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P/N 10-5511Z	\$ 3.21
P/N 10-7461-1	2.20
P/N 10-9978	1.51
P/N 10-12063Y	7.75
P/N 10-13373	3.30
P/N 10-15828Y	2.80
P/N 10-20505	5.50

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P/N 50654	4.40
P/N 50857	21.38
P/N 51163	38.65
P/N 52141	15.66

PRATT & WHITNEY PARTS

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P/N 1744	\$12.67
P/N 9514	1.12
P/N 24073	5.88
P/N 24966	19.38
P/N 26485	25.60
P/N 32725	11.88
P/N 53260	15.73

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MARCH 1947—PAGE 25



B-29 Superfortress sprayed with strippable plastic

THE AAF AND PACKAGING

By MAJOR GENERAL L. C. CRAIGIE, Chief, Engineering Division, Air Materiel Command

and

W. D. LONG, Chief, Container and Packaging Branch, Engineering Standards Section, Wright Field

THE postwar packaging program of the Army Air Forces is designed to provide the maximum in required protection at a minimum cost, based on the initial cost of the item, replacement cost, design and material involved, the length of time the item is expected to be in storage and the hazards it will be subjected to during shipment and storage. Domestic and export packaging requirements are tailored to fit three categories: immediate use, limited storage and extended storage.

The primary lessons learned from experience in World War II indicate that protection against corrosion is a vital necessity, both in domestic and foreign theaters, and that the requirement for protection against mechanical damage vary according to the type of carrier employed and the destination of the shipment. Rough handling which resulted in excessive damage to, and loss of material is indicated to be more severe at present than at any time during the war, hence careful screening of packaging requirements is necessary to insure safe arrival at ultimate destination.

Where immediate use is indicated

*Good packaging is a
science and here is
what the AAF is
doing about it*

for material and the nature of the item is such that extra precautions for its protection are not necessary the AAF is, in some instances, accepting "commercial practice" packaging. Except as prepared by a limited number of contractors who are packaging-conscious and desire to maintain the quality of their product, this type of packaging is considered inadequate since there are no accepted commercial standards in general use and the tendency is to use the cheapest possible methods and materials and to shift responsibility for in transit damage to the common carrier.

Domestic shipping containers are generally required to be in accordance

with interim standards whose requirements fall between the export standard and the requirements prescribed by the common carriers. Such standards were adopted because of the poor quality of containers meeting carrier standards and the resulting high damage to shipments.

Export shipping containers continue to follow wartime standards, with metal containers, solid lumber, and plywood boxes predominating. All export plywood containers are constructed of "10 cycle" plywood to eliminate losses due to delamination and deterioration. Lumber shortages have added impetus to conservation and reuse programs, and the use of other materials is the subject of constant study in the Packaging Laboratory.

Extended research is being carried on to develop adequate cushioning for items subject to damage from shock. Evaluation of numerous commercially available cushioning materials and their respective properties has provided a reliable index as to their merits and the thickness of each type required to do a given job. Springs, both coil and flat, standard and special rubber shock mounts and substitutes which can be

built of wood are being standardized and used. For depot use, standardized blocking and bracing or supports are procured, many of which are adaptable to several items, merely by shifting from one set of lugs or mounting holes to another.

For extended storage, emphasis is placed on metal containers wherever possible. Such containers when hermetically sealed provide the utmost in protection against corrosion and are generally less expensive than other types of containers which require further protection of the item against corrosion. Where reinspection of contents is required, the metal container contributes materially to savings in man-hours and money by lengthening the time period between inspections. Use of ring and bolt closures on most containers provides a reuse feature which permits the container to be used until it becomes so battered a hermetical seal can no longer be accomplished. Insofar as possible, containers which can be produced on current equipment are used. Diameters are limited to those that industry is tooled to supply while the height is varied as required. Such containers are now warehoused by the AAF, and supplied to contractors as Government-furnished equipment.

Unusual Sizes

Special or "outsizes" are developed as needed. Items ranging in size from small electric parts to aircraft engines, both radial and jet, are now included in the metal container program. A review of all items appearing on the AAF stock list is being accomplished to determine the items which should be placed in metal containers and to indicate the size of the container together with necessary blocking, bracing and cushioning data.

Metal drums for engines contain shock mounts and mounting plates which will accommodate engines of different types and sizes. Drums are usually built in two sections and employ a neoprene gasket seal and a bolt closure. Engine mounts which can be



Maj. Gen. L. C. Craigie



W. D. Long

used in the drums or as a mount for air shipment without container are being developed. Interchangeability of parts is maintained wherever possible to reduce the number of spare parts carried in stock and to provide a ready means of cannibalizing repairs. Special attention is devoted to the prevention of Brinnelling of bearings during shipment and all containers are subjected to rough handling tests prior to release of drawings and specifications.

Sprayable plastics are being employed to preserve some large items such as airplanes. While this method is not considered to provide the ultimate in required protection due to certain shortcomings in the materials currently available it does provide a substitute for hermetically sealed containers or air conditioned warehouses, and under controlled conditions will provide ample protection for the life of the airplane. Since controlled humidity within the airplane is essen-

tial to preservation, the sprayed plastic barrier must have a low moisture vapor transmission rate and a desiccant must be used to maintain the relative humidity below the point where corrosion occurs.

Storing Planes

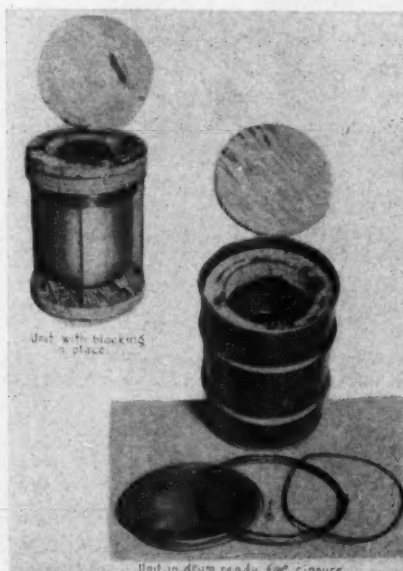
In preparing airplanes for storage, the interior is first dried out by introducing a stream of warm dry air. All sharp corners, edges and proturbances are cushioned to prevent barrier puncture. Small openings are covered with tape and large openings are criss-crossed with tape at intervals of about six inches after which a plastic spray web coating is applied which bridges all openings and provides a base for the strip coat. The strip coat is applied over the entire plane and is readily removed by peeling. The moisture vapor transmission rate of available strip coats being high, it was found necessary to overcoat with a material having a low transmission rate and since removal was not a problem due to the strip coat underneath, asphaltic compounds are used.

One coat of the asphaltic product is applied and a second coat of the same material to which aluminum

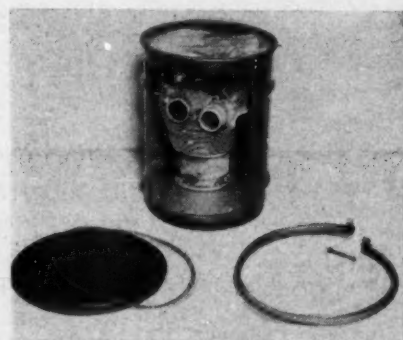
(Concluded on Page 38)



Instrument pack using sanitary container



Packing material supports and container



Cutaway of an engine cylinder pack

Air Freight Forwarder CASE

AT this writing Earl J. Cox, examiner for the Civil Aeronautics Board in the long-awaited Air Freight Forwarder Case, is still wading through an avalanche of testimony by representatives of air and surface carriers and services. Opened in the Chamber of Commerce of the State of New York Building in New York City, the case was moved successively to the Federal Building and the board room of the Aviation Section, New York Board of Trade.

It was John F. Budd, publisher of *Air Transportation* and chairman of the Aviation Section, who prodded the CAB on its lethargy in recognizing air freight forwarders and consolidators. Invited to present his views, Budd said:

Some four months ago the CAB examiner proposed and recommended that air freight forwarders and consolidators be permitted to operate with all carriers—certificated and uncertificated until 60 days after the Cab arrived at a decision in their case. What has hap-

pened to this recommendation? Why hasn't it been acted upon?"

He pointed out that air freight forwarders are not direct carriers and that they give no additional services "to compete with the already reduced business of the airlines." Budd stressed the fact that "the forwarders can go out and get business to help make up this slack."

Boon to Industry

Largely instrumental in the recent recognition of the foreign freight forwarder, by the International Air Transport Association, Budd has for several years been fighting for similar recognition of the domestic freight forwarder by the CAB. He maintained on the stand that "domestic freight forwarder and the newly created air freight forwarder have it within their power to give air cargo its biggest boost in history."

He endorsed the recommendations of John W. Moore, traffic manager for air

transport, Port of New York Authority (reported in last month's issue of *Air Transportation*), but suggested four additional ones:

"1. That the CAB in its final deliberations agree on a precise definition of what constitutes an air freight forwarder and his functions;

"2. That as an integral part of this definition it deny recognition to any person or firm in which a shipper has a direct or indirect interest; in other words, any person or firm claiming a right, title or interest, directly or indirectly, in or to the merchandise handled by the air freight forwarder;

"3. That such a definition further exclude all direct carriers from functioning as air freight forwarders;

"4. That all qualified forwarders should be recognized without distinction."

Inter-Maritime Forwarding Co., Inc.



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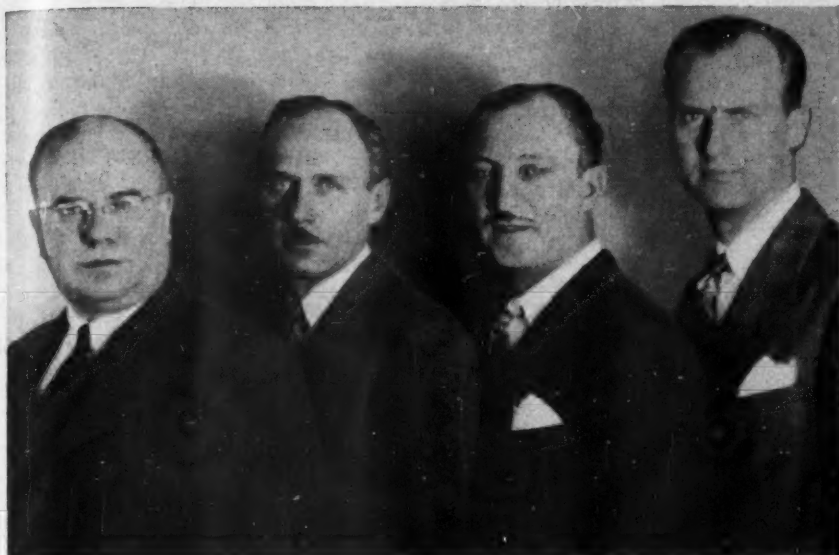
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AIR-MINDED FREIGHT FORWARDERS



Recently elected officers of the Eastern Chapter of the Air Freight Forwarders Association (left to right): George Dart, Mercury Airfreight Corporation, chairman; John S. Gorby, Stark Shipping, Inc., vice chairman; James Duhl, Fast, Inc., secretary; and Edward J. Longe, National Air Cargo Coordinators. Firms represented at the initial meeting of the chapter were: Mercury Airfreight Corporation; Phlanx Air Freight, Inc.; ViAir Service, Inc.; Sun Transporters, Inc.; World Wide Airways Express, Inc.; National Air Cargo Coordinators; Federal Air Freight, Inc.; Stark Air Shipping, Inc.; Air Cargo Exchange, Ltd.; Gilbert Air Freight Corporation; Fast Service Shipping Terminals; Skyways Freight Forwarding; Air Dispatch, Inc.; California Growers Air Express; Fast, Inc.; White Star Air Terminal; All-Air Freight, Inc.; Flying Cargo, Inc.; P. A. Bernacki; Emery Air Freight Corporation.

Earlier, Kinsey N. Merritt, vice president-traffic of the Railway Express Agency, told Examiner Cox that a 50 percent reduction in the rate of air express could bring about an increase of possibly 300 percent in the volume of air freight transportation. He discussed the place of REA in air property transportation, maintaining that the operations of his organization differed from the other air freight forwarders in that they did not consolidate or hold for aggregation.

Merritt declared that REA was not seeking any exclusive privilege in the handling of indirect air transportation "of all property whether classified as air express, air freight, air cargo, or otherwise."

"It desires only the right to compete with other indirect carriers in furnishing air carriers, the air industry, and the public with the most efficient, economical and complete indirect air transportation service."

The question naturally arose that since REA is railroad owned how could it justify its position in the air freight business; the two are competitive. Merritt replied that it was good business and advantageous for the agency to do so. He observed that excellent coordination of the service between truck, rail and plane to its more than 23,000 outlets in the United States was in the public interest and part of REA's responsibility.

REA delivered to the examiner a four-volume collection of exhibits: *Organization, Operations, Statistics and General Information*; *Promotion of Air Express, 1927-1946*; *Airport-to-Airport Mileage Map for Rate-Making Purposes, June 1, 1946*; and *Miscellaneous*.

Evidence Given

Testimony in the Air Freight Forwarder Case was or will be presented by the following: Air Transport Association of America; Air Freight Forwarders Association; United Air Lines; American Airlines; American Overseas Airlines; Northwest Airlines; Eastern Air Lines; International Veterans Airlines; Continental Airlines; Trans World Airline; Railway Express Agency; Commercial Airways Agency; PACO Service; National New York Packing, Inc.; International Forwarding Company of Chicago; International Expeditors, Inc. of Chicago; International Expeditors, Inc. of New York; Mississippi Valley Transportation Company; Wells Fargo Carloading Company; Skyways Freight Forwarding Corporation; Air Dispatch, Inc.; Air Express International Agency, Inc.; Air Express International, Inc.; Acme Air Express; ABC Air Freight Company, Inc.; Emery Air Freight Corporation; Gilbert Air Freight, Inc.; Republic Carloading and Distributing Company, Inc.; Western Air Freight Forwarders, Inc.; Universal Air Freight Corpora-

tion; Stark Air Shipping, Inc.; Fast Service Shipping Terminals; Airway Express Agency, Inc.; ViAir Service, Inc.; Fast, Inc.; Peter Bernacki; Port of New York Authority; John F. Budd; Baltimore Association of Commerce; New York State Department of Commerce; Baltimore and Ohio Railroad; Mortex Distributors, Inc.

Meanwhile, the recently organized Air Freight Forwarder Association, formed in Kansas City, has been incorporated in the District of Columbia and headquarters set up at 1029 Vermont Avenue, N. W., Washington 5, D. C. Jack S. Nelson, manager of the Air Cargo Forwarding Agency, Kansas City, is chairman of the organization; and Richard D. Brooks, of National Air Freight Forwarders, Detroit, is secretary-treasurer. Charter members of the association are:

Air Cargo Coordinators, Cleveland; Air Cargo Forwarding Agency, Kansas City; Federal Air Freight Company of California, Los Angeles; National Air Freight Forwarders, Detroit; National-Wide Air Freight Consolidators, Inc., Chicago; Air-Con, Inc., Chicago; National Air Cargo Coordinators, Inc., Chicago; Monarch Air Service, Chicago. Air Brokers, Inc., Milwaukee; Skyways Freight Forwarding Corporation, New York; Stark Air Shipping, Inc., New York; Air Dispatch, Inc., Cincinnati.

Syrian Airline Helped by PAA

Pan American World Airways has completed negotiations for cooperation with the Syrian Aviation Company which operates from Damascus to Bagdad, Cairo and Djedda.

PAA has entered into an agreement with the Syrian airline to provide know-how and airline experience as well as spare parts and overhaul assistance. The arrangement does not include participation in the ownership of the Syrian company. It is headed by Hamilton J. Smith, former PAA captain, and operates one DC-3. Service was begun last December 21.

The line terminates at Djedda temporarily, but with the delivery of additional equipment and final perfection of arrangements is expected to be extended to Ankara and possibly beyond. PAA will assist in training personnel and furnish active operational aid. Syrian connects at Damascus with PAA's authorized route from London through the Middle East to India.

United Air Lines Nonstop Flights

United Air Lines has been granted authority to operate nonstop service between Detroit and New York, and between Detroit and Allentown, Pennsylvania, on its Route No. 1. Elimination of the stop at Youngstown, Ohio, will reduce the current travel time by 17 minutes eastbound and 24 minutes westbound on DC-3 schedules, and 35 minutes eastbound and westbound on DC-4 operations.

IT'S AN *Air* WORLD

REG. U. S. PAT. OFF.

By L. A. GOLDSMITH, *Economic Analyst*, AIR TRANSPORTATION

Relax in the Dominican Republic, one of the Caribbean island countries which is going all out to capture a good part of the tourist trade.

IT is a far cry from the primitive island of Hispaniola discovered by Columbus to the modern-day tourist's haven of delight which the Dominican Republic presents for the pleasure of its Good Neighbors from the North.

Air transportation makes it possible to go from New York to Ciudad Trujillo, the capital city of the Dominican Republic, in 10 hours. The trip is made in two hops via San Juan, Puerto Rico. It is 8½ hours to San Juan from LaGuardia Field; and from San Juan to Ciudad Trujillo it is just an hour-and-a-half longer. Or, if you care to make the trip via Miami, it is a non-stop flight of five hours.

Travel red tape is conspicuous by its absence, whichever way you decide to go. The Dominican immigration authorities require only a tourist's card;

that's all there is to the entry formalities. Cost of the flight from New York to San Juan is \$150.00 round trip, and the Puerto Rican capital to Ciudad Trujillo (also round trip), \$43.20. Of course, don't forget the 15% transportation tax.

In Ciudad Trujillo there is the government-built Hotel Jaragua, a lavish modernistic structure easily appreciated by visitors from the United States. American-operated, it offers everything in true Hollywood style: beautiful tiled terraces; cool swimming pools; breakfast or luncheon at the pool or under gaily colored sun umbrellas. Or you can dine in de luxe fashion while facing the gardens and the swimming pool. And what food!

Every night there is dancing; and if this is not your dish, you might be

tempted to try your luck at the roulette wheel in the hotel's own casino.

Your room possesses a private porch. If you leave the tall doors open you can hear the roar of the Caribbean waves pounding against the rocky shoreline, just beyond the hotel.

Soon you will be able to visit many more interesting and unusual travel spots throughout the entire Dominican Republic. As part of its program to develop tourist trade, the Dominican Government is planning to build a string of hotels in the leading mountain and beach resorts. One has already been constructed in San Cristobal, 25 miles from the capital.

Slated for special development is Boca Chica, a strip of fine white sand facing a wide-mouthed, sheltered bay. A de luxe hotel on the order of the Jaragua will be built at this beach, which is an hour's drive from Ciudad Trujillo.

There are four parallel mountain ranges which cut across this West Indies country, and in one of these ranges is a highland town where tourists some day will hunt, hike, ride horseback and swim in swift mountain streams. It is Costanza, and it has the same equable climate as Guatemala. It is not only high in altitude, but high on the Government list for future developments. In addition to the hotel,

(Concluded on Page 38)



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Jack Frye Resigns As TWA President

With Jack Frye's resignation as president of the Trans World Airline, the bitter fight with Howard Hughes, principal stockholder, for control of the company, has come to an end. Management of the airline will remain in the hands of a three-man executive committee of the board of directors until the annual meeting on April 24.

Comprising this committee are Palmer Bradley, of the law firm of Andrews, Gurth, Campbell and Bradley, counsel for the Hughes Tool Company; A. V. Leslie, Pittsburgh banker, and financial adviser to Hughes, and John A. Collings, a member of the original TWA board.

Although there has been no definite word on the subject, the name of La Motte T. Cohn, chairman of the board of the Northrop Aircraft Corporation, is being mentioned as favored by Hughes interests for the TWA presidency. The name of Warren Lee Pierson, former head of the Export-Import Bank and present head of the American Cable and Radio Corporation, has come up as the possible new chairman of the board.

Frye, E. Lee Talman, and T. B. Wilson are no longer continuing in administrative capacities, "but may continue as consultants." Wilson's resignation had been announced by himself two weeks earlier. The former TWA president's statement read in part:

"I have decided that I will not stand for reelection as president of TWA or as a member of its board of directors. I have arrived at this decision because I am not in agreement with the controlling stockholder with respect to the financing of TWA and the operation of its world-wide routes . . . The satisfaction of having completed the development program which we set out to accomplish in the early days of air transportation can exist in full measure only if this great system is operated soundly and with full recognition of our responsibilities to the public and to our government.

"This cannot be achieved without full accord between ownership and management on matters of basic policy and as I see no likelihood of such a situation developing, I prefer to withdraw from my present responsibilities . . . TWA is potentially one of the most profitable of the world's airlines, and it should provide good futures for you who are TWA.

"If the policies with which I disagree are unsound, it will only be a question of

time until they are changed, so I urge you individually and collectively to do your best for the airline you have helped me to build."

According to reports, the basic disagreement between Frye and Hughes was the importance of the airline's International Division. This went through a tremendous expansion during recent years, but at the present time it is undergoing personnel slashes. One unconfirmed report stated that Hughes favored placing TWA's domestic routes on a profitable operating basis before concentrating on international expansion. It was even rumored that he wished to dispose of the International Division entirely.

Air Freight Terminal Opened in N. Y. by AA

American Airlines has opened an air freight terminal at 318 East 38th Street, New York, near the entrance of the Queens Midtown Tunnel. The terminal will handle freight for both Newark and LaGuardia Airport. Merchandise will be rated, billed, and labeled here. It is anticipated that AA's new terminal will speed up the movement of both incoming and outgoing cargoes.

Outdated Ground Facilities Are Hit by IATA Committee

Speaking at a press conference in the New York offices of the International Air Transport Association, Carl Kneisel, chairman of the Aerodromes, Air Routes, and Ground Aids Committee, charged that the airlines, which are putting 1947 equipment into service, are being forced to rely on prewar ground facilities.

"The airlines are ready now to use ILS (Instrument Landing System) and many of their planes already are equipped for it," he said, "but we are waiting for the installation of the ground equipment. We should like very much to have GCA (Ground Controlled Approach) as a supplementary landing aid, but that equipment is out of our jurisdiction, since it is a ground device which must be installed by the airport authorities."

Kneisel disclosed that the committee had voted to urge the "quickest action possible" to bring about the installation of high intensity lighting at all international airports. It is also in favor of using both ILS and GCA for safe landings in bad weather. Besides the United States, the nations represented at the conference were Canada, Sweden, and Holland.

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LEGAL NOTES

on Air Transportation

By GEORGE BOOCHEVER

Chairman of the Legal Committee and
General Counsel to the Aviation Sec-
tion, New York Board of Trade

IN *Casteel v. American Airways, Inc.* (88 SW (2) 976, 261 Ky. 818) there was considered, for the first time, the question of the liability of an air carrier for damages for ejection of passengers from an airplane.

The plaintiff and her deceased husband, who was afflicted with tuberculosis, took passage on the airline from El Paso, Texas, to Louisville, Kentucky. He was permitted to travel in pajamas and a robe. They were carried to Fort Worth, Texas, where it was alleged they were put off and compelled to wait for five hours until they were transported, at the defendant's expense, by train to Louisville. The damages were claimed for the injury to health, humiliation, disgrace, etc.

The carrier sold the ticket with full knowledge of Casteel's condition. When the machine reached Fort Worth, he was carried into the airport, where a doctor who examined him advised that he should not continue by plane but ought to finish the

journey by rail. The plaintiff and her husband protested but they were transported by rail and then by automobile to their home in Louisville, where he died a week later.

After pointing out that the air carrier was a common carrier and as such obligated to receive and transport passengers without discrimination in the public interest, the Court said:

"This demand of the public interest is of necessity subject to some exceptions; thus, there may be justification for refusal of carriage for want of room in the vehicle. Furthermore, 'A carrier of passengers not only has the power, but it is its duty, to adopt such rules and regulations as will enable it to perform its duties to the traveling public with the highest degree of efficiency, and to secure to its passengers all possible convenience, comfort and safety.' . . . Manifestly, those rules must be reasonable, according to the judgment of the courts, and they will be deemed reasonable if they redound to the comfort, convenience, safety, and health of the traveling public in general. Indeed, it is the duty of the carrier to adopt such rules and the duty of the passenger to obey them. A carrier's duty to other passengers cannot be lost sight of in observing the rights of an individual traveler."

The court then went on to point out the exceptions applicable to carriers of passengers, to "decline to receive for transportation one afflicted with contagious diseases whose presence would endanger the health of other passengers."

On the point in issue, as to the obligation of the carrier which had with knowledge of the condition of health entered into a contract of carriage, the court said:

"After having entered upon his journey,

if the passenger becomes sick or in a helpless condition, it is the duty of the carrier to exercise the reasonable and necessary offices of humanity toward him until some suitable provision is made. This may require that he be removed and left at a suitable place until he becomes able to resume his journey or until he shall obtain proper aid and assistance."

The opinion of the learned court refers to the limitations on the right or power of ejection of a passenger for these reasons, viz., that it must be done in a proper manner and that "there must first be a tender or return of fare less than from the point of origin."

On the facts in the instant case, the court held that the ejection was justified under the law and that no tort was committed and affirmed the decision of the court which directed verdicts for the defendant.

Second Aircraft Show is Planned

The second annual National Aircraft Show sponsored by the Aircraft Industries Association will be held in November.

Several Eastern cities are under consideration as the location and final choice will be made known in the near future. Emphasis this year will be on personal aircraft and accessories, rather than an all-inclusive aircraft exposition such as was staged at Cleveland last November.

Colonel Tod Bates, wartime commanding officer at Luke Field, Phoenix, Arizona, will head the show activities. Bates was for many years the general manager of the Pacific Automobile Show at San Francisco and served as assistant director of the 1946 aircraft show.



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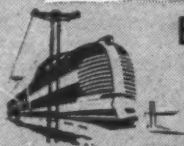


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By JOHN F. BUDD, JR.

THE traffic and sales representatives of the airlines, promised a more important role in the changing picture of air travel, learned a couple of months ago just what their new-found prominence would bring them in the way of knotty sales problems. Crashes, near crashes, Congressional investigations all tarnished the improved safe flying record set by these same lines in '46. The public, which appraises its own safety at an understandably high figure, became remarkably well read on subjects such as radar, ground controlled approach, etc. The Board of Governors of the Airlines Traffic Club of New York, cognizant of the challenge offered, found that until management let them know the "whys and wherefores" behind the outwardly slow adherence to such new bad weather aids as GCA, they would have to exploit what little technical knowledge they did have on hand.* They were not at all sure that this would be ample enough for them to deal with the big imponderable—the potential air traveler who no longer is such after reading the headlines.

All of which merely points out again that it is not enough to admit that the sales staffs are no longer mere adjuncts of the industry. The ability to do a good job depends upon their knowledge of what

they are selling, an understanding of the problems, based on thorough inside information.

Twelve years ago much of the airlines' promotional effort in the capital city was in making air travelers out of the hordes of Government personnel. A Washington Airline Traffic Committee was headed by Jerry O'Donovan, later a vice president with PCA (now Capital Airlines) as chairman, and met monthly in the board room of the Aeronautical Chamber of Commerce. Basically they were working for a greater public acceptance of air transport. Two of their better schemes were dreamed up by Pat O'Toole of United and Bill Briggs of Eastern and later of Northeast. At that time each airline gave a box to the transportation desks of the local hotels for use in distribution of their timetables. The porters were soon swamped with boxes, elaborate and simple, and they all ultimately found their way under the desks, out of sight.

O'Toole designed a box for use by all lines. It was so attractive that it soon found a place of importance. Briggs, one of the real airline press agents who later developed the Flying Fisherman's Club for EAL, engineered a neat cooperative advertising stunt. He had a gaudy display set up, complete with pictures of movie stars climbing in and out of the planes then serving Washington. This was placed at the head of the stairway in the capital's largest theater where a quarter-of-a-million persons passed it each week. It went over so solidly that the display made the rounds of all the theaters until it became shopworn.

These boys were the first airline salesmen, and their clubs the first Airline Traffic Clubs. Similiar committees at this time were established in Boston and Chicago.

Fowler Barker, at one time secretary to

the Washington group and now an aviation editor, wrote a piece about these lads a year ago, in which he said: "Possibly such groups should be started again . . . in every point in the world where more than one airline stops or has representatives."

This column itself is the answer, and next month I'd like to tell you about New York's first Airline Traffic Club, the one which preceded the organization now functioning, the largest to date of the current ALTCA.

*Since this article was written a belated attempt has been made to clear away this confusion.

ATC Building at LaGuardia For Air Mail Operations

Air mail operations have taken over the former Air Transport Command building located at La Guardia Airport. Previously they were housed in small quarters in the administration building.

Member airlines of the Air Transport Association supplied \$35,000 for renovation of the building. American Airlines has been designated custodian of the building and post office personnel will handle domestic and international incoming and outgoing air mail.

Air France To Extend Service

Air France is planning the extension of its international network from its Eastern terminal at Saigon, Indo-China, to Shanghai. The new Chinese service in which four-engined equipment will be operated is expected to start in May or early June.



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Wien Alaska And Ferguson Merge

Purchase by Wien Alaska Airlines of all stock and assets of Ferguson Airways, and the transfer to Wien of Ferguson's certificate of public convenience and necessity for operations in Alaska, has been approved by the Civil Aeronautics Board. Wien, operating extensive routes in Alaska, mainly from the terminal points Fairbanks, Fort Yukon, and Nome, will operate the routes of Ferguson which are in the same general area, as a part of its present system.

The transaction will make possible more frequent and direct service between points on the two airlines. The agreement for sale provided that the purchase price of the

carrier, or of the capital stock of Ferguson is \$32,300, payable \$20,000 upon execution of the agreement, and the balance in annual installments of \$5,000 each. Assets to be sold consisted of aircraft and parts, all hangars, shops and equipment, all real estate, and all certificates of public convenience and necessity owned by Ferguson.

MTA Air Forum

An air forum will be held on March 27 in the Hotel Pennsylvania under the auspices of the Metropolitan Traffic Association of New York. R. A. Kull, of Lamont, Corliss and Company, co-chairman of the Traffic Committee, has arranged the forum which will be under the chairmanship of William L. O'Brien, president of Fast, Inc.

CAB Gives KLM Another Stop

The Civil Aeronautics Board has granted permission to KLM to include Ciudad Trujillo as an additional intermediate point on its Curacao-Miami route.

KLM can serve Ciudad Trujillo as a part of its Curacao-Miami route between the intermediate points Aruba, Netherlands West Indies, and Port-au-Prince, Haiti, instead of serving Ciudad Trujillo on a separate route from Aruba, as it has done previously. The CAB felt that this new service would enable KLM "to perform certain of its services more efficiently and more economically than is possible under its present permit."

FIRST THREE MONTHS OF 5¢ AIR MAIL

Air Mail Field Post Offices	Pounds Dispatched 1946		
	September	November	December
Albuquerque, N. Mex.	19,672	12,743	23,027
Atlanta, Ga.	105,964	145,960	176,067
Billings, Mont.	14,204	20,106	28,484
Boston, Mass.	75,012	96,500	139,101
Buffalo, N. Y.	39,612	52,230	72,803
Cheyenne, Wyo.	12,222	27,641	21,679
Chicago, Ill.	518,236	785,426	972,640
Cleveland, Ohio	71,316	109,930	125,576
Columbus, Ohio	21,071	21,263	31,455
Dallas, Texas	140,363	208,139	251,527
Denver, Colo.	99,677	99,238	144,602
Detroit, Mich.	86,345	108,423	152,828
Fort Worth, Tex.	91,985	132,239	149,752
Indianapolis, Ind.	26,836	30,022	39,984
Jacksonville, Fla.	53,439	74,787	104,370
Kansas City, Mo.	111,411	115,874	182,819
Los Angeles, Calif.	376,112	561,402	818,200
Memphis, Tenn.	46,464	76,898	87,999
Minneapolis, Minn.	76,075	102,897	139,173
Nashville, Tenn.	40,966	67,081	66,573
Newark, N. J.	113,916	172,810	208,892
New Orleans, La.	62,364	82,635	96,367
New York, N. Y.	487,728	742,532	965,677
Omaha, Nebr.	52,904	79,642	95,749
Philadelphia, Pa.	54,875	73,462	95,551
Pittsburgh, Pa.	88,137	96,808	145,026
St. Louis, Mo.	77,950	84,238	120,701
Salt Lake City, Utah	51,770	69,027	83,349
San Francisco, Calif.	273,580	380,657	584,005
Washington, D. C.	253,793	310,074	386,082
	3,543,393	4,940,684	6,518,258

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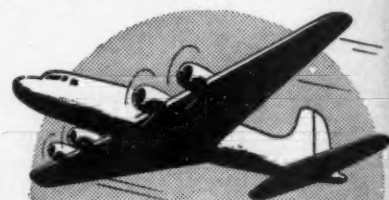
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★ EXECUTIVE ★

GRANT W. G. McCONACHIE, named president and chief executive of Canadian Pacific Air Lines. He has held the post of assistant to the president since last May. McConachie was the 1945 winner of the McKee Trophy.

LESTER EISNER, JR., elected president of Latin American Airways. A graduate of Princeton and Harvard, he formed Atco Airlines following his discharge from the AAF, and later merged it with LAA. The line operates in Ecuador.

PETER N. JANSEN, elected executive vice president of Bendix Helicopter, Inc., in which post he will act as operating head of the company. He has been vice president in charge of operations for a year. Jansen was formerly with Curtiss-Wright for 26 years.

DON R. BERLIN, elected a vice president of the McDonnell Aircraft Corporation. He will head aircraft contracts and engineering. A native of Indiana, Berlin has been an aeronautical engineer and engineering executive for a quarter of a century.

CHARLES S. CHESTON and **THOMAS M. CONROY**, elected directors of American Airlines, replacing Chandler Hovey and Charles Rheinstrom who recently resigned. Both Cheston and Conroy are well-known businessmen.

HOWARD B. DEAN, appointed administrative vice president of Pan American World Airways. He joined PAA in 1942 after 15 years in both the manufacturing and transportation phases of aviation.

OTIS F. BRYAN, named general manager of TWA. He has assumed the international Division responsibilities formerly assigned to Brigadier General Thomas B. Wilson.

W. C. MENTZER, elected regional vice president-operations of United Air Lines, taking the place left vacant by the death of R. E. Pfennig. He will head up all of UAL's operations from Denver to the Atlantic Coast.

D. B. MYERS, JR., named assistant to the president of Braniff International Airways. He was formerly employed by the North American Aviation Corporation.

QUENTIN ROOSEVELT, appointed assistant to Vice President Harold M. Bixby. He will be responsible for the supervision of all functions undertaken by PAA on behalf of the China National Aviation Corporation.

FORD KING, promoted to the position of assistant to the president of Mallard Air Service. He is a former member of American Airlines' sales staff.

ROBERT G. BUSH, JR., appointed assistant to the vice president-traffic of Mid-Continent Airlines. He has been with MCA since 1944.

LIEUTENANT GENERAL BARNEY McKINNEY GILES, named by Air Associates, Inc., to head up the company's engineering division. He retired last July from active service in the AAF.

ROBERT M. CARPENTER, appointed general manager of the Manufacturing Division, All American Aviation, Inc. He joined AAA last November.

★ TRAFFIC ★

CHARLES L. GALLO, formerly general manager for TACA in Central America, named director of traffic for TWA's International Division. He had been associated with TWA for 10 years prior to taking over the TACA job.

JAMES W. AUSTIN, elevated to the position of general traffic and sales manager for Capital Airlines. An ATC veteran, he joined the airlines last year.

PAUL D. NILES, now serving as chief traffic executive of Braniff International Airways, succeeding Charles E. Beard, recently made executive vice president.

R. P. BRINKLEY, **ROBERT J. MORGAN**, **DONALD E. BATEMAN**, **JAMES P. FARRELL**, **M. E. ANDERSON**, **RUSSELL G. COLLINS**, **T. S. ZAWASKY**, named by Northwest Airlines to the following posts: Brinkley, director of reservations and space control; district traffic manager at Tokyo; Bateman, district traffic manager at Manila; Farrell, district traffic manager at New York; Anderson, assistant district traffic manager at Minneapolis; Collins, senior traffic representative in Chicago; Zawasky, in charge of traffic solicitation in the La Crosse area.

CONSTANTINE DE STACKELBERG and **GERALD R. THORNTON**, appointed by TWA to the respective positions of district manager in Spain and France.

HARRY B. DALGAARD, named district traffic manager in Stockholm for American Overseas Airlines. A native-born United States citizen, he lived in Denmark for 16 years.

W. G. COURTNEY, appointed regional traffic manager, West Indies Region, for Trans-Canada Air Lines. He has been with TCA since its formation in 1937.

E. J. RIEDERER and **HARRY R. STUDER**, named by Mid-Continent Airlines to the respective posts of supervisor of rates, tariffs, and schedules, and regional traffic manager. Riederer joined MCA in 1937; Studer in 1945.

HERBERT H. MURPHY, transferred by TACA Airways to New York where he is serving as district traffic manager. For the last six months he served as sales promotion manager in Miami.

HERBERT L. HANSEN, JR., appointed district traffic manager for Western Air Lines at Great Falls, Montana. He is an AAF veteran.

RICHARD C. TALBOT, **DICK HOVING**, and **GEORGE COLLETT**, named by Braniff to the following posts: Talbot, district traffic manager at Tulsa; Hoving, district traffic manager at Pueblo; Collett, special representative in Chicago.

JOSEPH S. CHRISTMAN, appointed division traffic manager for Miami Airlines, with offices in New York.

FRANCIS J. KING, who has taken over the job of city traffic manager in Evansville for Chicago and Southern Air Lines. He joined C&S a year ago.

J. RICHARD SCOTT, serving Southwest Airways as manager of tariffs and rates. He comes to Southwest from TWA.

MARGERY M. McINERNEY, appointed Midwestern regional traffic repre-

Howard B. Dean

Otis F. Bryan

W. C. Mentzer

Charles L. Gallo

James W. Austin

Harry J. Cooper

representative for KLM's north American Division. She has been associated with KLM since 1938.

MAYO H. THOMAS, named general agent in the Western Territory for Santa Fe Skyways. He recently resigned as assistant general traffic manager of the Flying Tiger Line.

★ CARGO ★

HARRY J. COOPER, former district sales manager in Montreal, appointed manager of passenger and cargo sales for Northeast Airlines. He is a former TCA employee.

WILLIAM O'DONNELL, who has been with United Air Lines since 1933, promoted to the position of chief of cargo sales at San Francisco.

★ PASSENGER ★

RICHARD W. VALENTINE, named to the position of assistant regional manager, reservations and ticket offices, for AA. He will be stationed in New York.

EMILY YOUMAS, appointed manager of passenger relations for Capital Airlines. She has been with the airline since 1942.

★ OPERATIONS ★

R. V. CARLETON, formerly chief pilot for Braniff, promoted to the post of Flight Operations head.

GILBERT L. HENRY, appointed staff assistant to UAL's vice president-operations.

★ SALES ★

SYDNEY D. SMITH, named district sales manager for the Los Angeles region of PAA. He has been with the airline for a decade.

H. WEBSTER CRUM, appointed sales manager of the Goodyear Aircraft Corporation. He joined the Goodyear organization 18 years ago.

★ MISCELLANEOUS ★

COLONEL M. M. "JACK" FROST, vice president and assistant to the president

of Eastern Air Lines, awarded the Legion of Merit by the War Department.

MAJOR GENERAL OLIVER P. ECHOLS, elected by the Aircraft Industries Association of America to serve as president as well as a member of the Board of Governors. Other new members of the board are **E. B. NEWILL**, **H. M. HORNER**, **MUNDY I. PEALE**, and **HARRY T. ROWLAND**.

FRANK N. PIASECKI, president of the Piasecki Helicopter Corporation, elected an honorary fellow of the American Helicopter Society.

MAJOR GENERAL CECIL R. MOORE, named director of the Baltimore Aviation Commission.

ALFRED NYHLEN and **GORDON BULLOCH**, elected to the respective posts of president and vice president of the Airlines Traffic Club of New York. Nyhlen succeeds Richard T. McIntosh who resigned suddenly, and Bulloch fills Nyhlen's former office.

Air Age Packaging

(Continued from Page 8)

employ only relatively few specialists. If, for example, they employed men experienced in corrugated board and paper-box fields, how could they keep up with and take advantage of progress in plastics; or wire-bound boxes, or glass, and so on?

Then, too, the development of successful retail package units demands a great deal of close liaison work with growers, producers, shippers, retailers, and consumers. The required manpower could scarcely be made available under a centralized program. Once the decision to veto an industry-sponsored program had been made, it was apparent that good progress would require some quick and easy means to

disseminate the results of individual progress to all airlines. Acting upon the recommendations of its Sales Promotion Committee, the Air Traffic Conference prepared and distributed to all of the scheduled airlines an *ABCs of Packaging for Air Cargo*. Published in loose-leaf form to permit ready supplements and additions, this is simply an abridgment of all specialized air cargo packaging data developed to date. Contributed by the ATA members themselves, the material represents a true pooling of individual knowledge for the common good. The pages are arranged alphabetically by commodities. In addition to their remarks on recommended packaging, they normally also

detail any pertinent physical handling requirements, together with remarks upon differences with respect to surface practices, etc. If a shipper who asks "How?" happens to refer to an item that has already been dealt with, an airline has the answers in this publication regardless of whether or not it participated in developing them.

A second publication *Packaging and Handling* is published monthly, solely for the scheduled airlines who are members of the Conference. Its lead stories report new work and findings while its final section contains new or revised sheets for inclusion in the *ABCs*.

Mutual benefit for shippers and carriers alike is the objective of the program.



JUAN T. TRIPPE, president of Pan American World Airways, accepting the Ligue Internationale des Aviateurs citation from President **HARRY S. TRUMAN**, which went along with the Harmon Aviation Trophy. The award was made to Trippe for "outstanding leadership, patriotism, unselfish devotion to the security and economic progress of the United States" before and during World War II.



CAPTAIN EDDIE RICKENBACKER, president and general manager of Eastern Air Lines, being congratulated by Secretary of War **ROBERT P. PATTERSON** (left) after presentation of the Medal of Merit for outstanding services to the United States in World War II. General **CARL A. SPAATZ**, commander of the United States Army Air Forces, is looking on with definite approval.

Western, United in Air Route Switch Agreement

Terrell C. Drinkwater, president of Western Air Lines, and William A. Patterson, president of United Air Lines, revealed earlier this month that they had signed an agreement and filed an application with the Civil Aeronautics Board for the transfer of the Denver-Los Angeles route from Western to United. The transfer, which includes not only the route franchise but certain ground and flight facilities and equipment necessary to operate the route, involves a sum of approximately \$4,000,000.

Drinkwater and Patterson emphasized that voluntarily and for the first time two domestic air carriers had taken what they believed to be constructive steps to rearrange the United States air route pattern into a "sensible system."

"Like a good many other carriers, we have been suffering from 'expansionitis,' and we have not been concentrating enough on service to the territory in which we are certificated," Drinkwater said. "The Denver-Los Angeles cut-off will mean that United Air Lines will be able to provide direct service to Los Angeles on the same basis as American and TWA, the other two transcontinental airlines now serving the city."

Drinkwater pointed out that WAL's experience in developing and operating the Denver-Los Angeles route has demonstrated that the future potential of this route lies in its utilization as an adjunct of a transcontinental system and is contrary to the north-south pattern of service

which WAL intends to pursue in the Rocky Mountain-Pacific Coast area.

"We are withdrawing all of our applications now pending before the Civil Aeronautics Board proposing service east of the Rocky Mountains, with the exception of the application for service between Great Falls and Seattle," he said. "We will then be in the unique position of being able to serve adequately the fastest growing section of the United States—that area lying between the Rocky Mountains and the Pacific Coast, with an integrated air transport enterprise that is both economically and geographically sound."

Western's president said that his company's future service plans were predicated upon the successful outcome of an application now pending before the CAB to extend its routes from San Francisco to Seattle and Portland. He stated that since passing of the Civil Aeronautics Act of 1938, economics of air transportation would indicate that mistakes have been made in working out a national route system.

"One of the basic errors," Drinkwater declared, "was lack of insistence that the air routes of a carrier should, altogether, form a logical transportation system. This illogical structure of routes has a direct bearing upon the financial position of several of the airlines today, a relationship which is hardly coincidental. We fully expect that the process of pruning our route structure down to that of a regional carrier and possession of a definite service pattern will place our company on a sound financial basis. The same could probably also be said of other members of the air transport industry."

"We are not interested in acquiring more

route mileage in marginal territory simply for the purpose of being able to state in our publicity releases that we are the fifth, sixth or seventh largest carrier in the business. Rather than worry about equalizing our size with that of some other carrier, Western must and will show more and more concern about public convenience and necessity for a carrier born in the West, owned in the West, serving the West—the basic premise upon which the company was founded."

Young Filipinos to Receive CAA Air Traffic Training

Fifty young men from the Republic of the Philippines will register early in May at the Civil Aeronautics Aeronautical Center, Oklahoma City, for air traffic control instruction at the Will Rogers Field, and academic schooling at the Oklahoma City University. While in this country the students will receive technical instruction in handling air traffic.

This will be the first group of CAA students from the Philippine Republic, under the Philippine Rehabilitation Act. The technical courses qualify the graduates as airport traffic control tower operators, aircraft communicators, or aircraft dispatchers. The academic work will lay special stress on mastery of conversational and technical English and orientation to American customs. Transportation from the Philippines and return at the completion of training is provided, and a grant for sustenance made. Accident insurance and medical attention also are supplied.

Manila

40 HOURS

FROM THE WEST COAST IN SWIFT
4-ENGINE SKYMASTERS VIA

PHILIPPINE AIR LINES

TRANS-PACIFIC AIRFREIGHT AND PASSENGERS

When days mean dollars, modern businessmen know the
skyroute is the economical route to

MANILA • HONG KONG • SHANGHAI

For Vital Airfreight or Time-Saving Business Trips

WEEKLY FLIGHTS

40 hrs. Flying Time
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Philippine Air Lines, Inc.

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75 West St. • Whitehall 4-3866

OR SEE YOUR LOCAL FREIGHT OR TRAVEL AGENT



It's an Air World

(Continued from Page 30)

an airport is slated for construction there.

All told, about \$3,000,000 will be spent in the building of hotels alone. Holding up the project is the scarcity of building materials.

As a direct result of Americans' travels abroad and the expenditures they make in foreign countries, "invisible" imports are created which build up dollar balances for these foreign countries. This makes it possible for their citizens to send us increased orders for needed goods.

Strange as it may seem to our traveling tourists, they create the almost paradoxical situation of eating their cake and having it to deliver on a silver platter for the good of their own country as well as the foreign country which they visited for pleasure. This is certainly a most painless method of building up more and more "imports," so badly needed for our world trade balances and future world trade development.

While these imports are technically termed "invisible," they are quite visible to the American manufacturer or producer of agricultural commodities when they come back in the form of orders, and when they are able to sell more and more in overseas markets and receive profitable payments in those very dollars derived from the everlasting desire on the part of American citizens to go, see and travel in foreign parts.

The AAF and Packaging

(Continued from Page 27)

flakes have been added is applied to further lower the transmission rate and to reflect the rays of the sun. Engines if left in place are processed in the usual way by fogging with preservative oil and the introduction of dehydrator plugs into spark plug holes and other openings, prior to being enclosed in the plastic spray barrier.

Requirements for shipments of materiel by air are based on the hazards to be encountered during surface shipment prior to and after air shipment, as well as conditions encountered in flight. Weight and cubage are held to a minimum consistent with safety and to this end specifications have been issued to cover light-weight crates having a high strength factor. Some use has been made of collapsible, wire cargo baskets to hold a number of small packages. Safety valves are provided in containers requiring pressure release. Development of pallets, pallet loads and containers designed to fit the cargo spaces of the planes of tomorrow is being expedited. The field of free fall containers is being explored

to provide additional and more rugged containers.

A test chamber to simulate actual flight conditions including altitude, temperature change and vibration during take-off, flight, and landing will shortly be available. This chamber is being built primarily to test all dangerous materials transported by air including all items peculiar to the armed services and the materials classified as dangerous by the Interstate Commerce Commission manual for surface shipment. These tests will result in the issuance of a manual or specification covering the transportation of dangerous materials by air, and will list prohibited and approved items together with such precautionary packaging as is necessary.

Summed up, the postwar program on packaging is aimed at insuring usable materiel being immediately available for use in any theatre after being subjected to the hazards of storage and shipment, and to accomplish this with the least drain on natural resources and the taxpayers money.

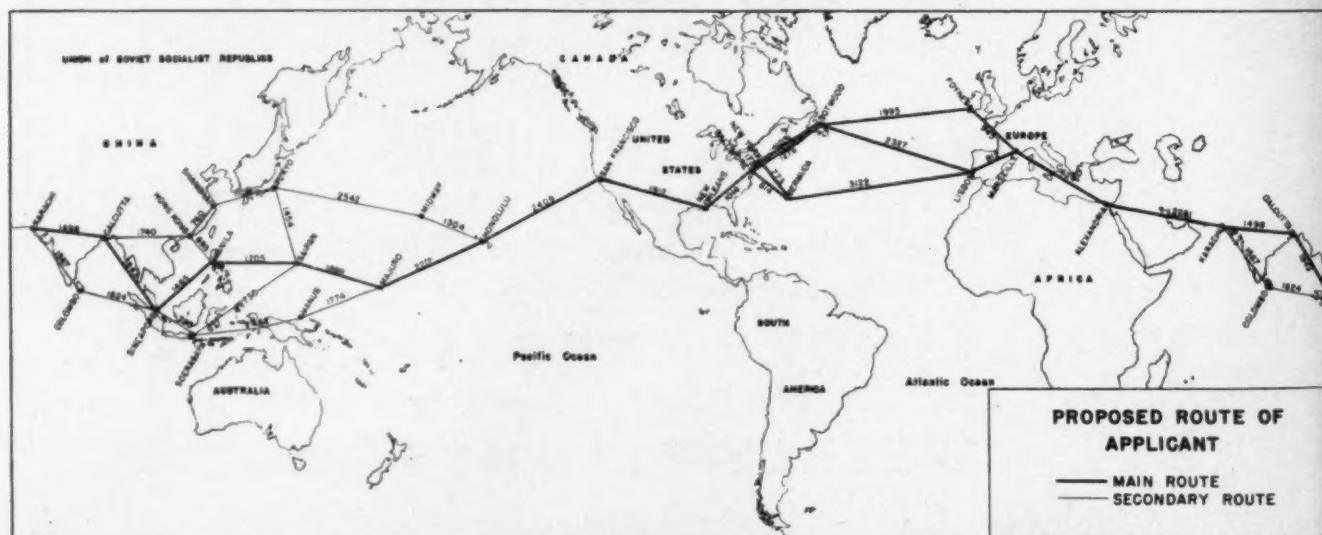
Air Safety Aids

CAA Administrator Theodore P. Wright has told a Senate Interstate Commerce subcommittee that basic air safety aids would be installed at 160 major airports of the United States within 18 months. Thirty-two already have been completed.

BNA Organized

Formation of a privately owned stock company, Burma National Airways, Ltd., was recently completed. It will enjoy monopoly rights on internal services, and is expected to operate to Singapore and Calcutta. Equipment will be Aerovans, Vikings, and Dakotas (DC-3s).

'ROUND THE WORLD BY FLYING BOAT



Map showing 57,000 miles of air routes which Captain C. H. "Dutch" Schildhauer, the Navy's well-known exponent of flying boats, proposes to operate as a civilian. He would encircle the globe with seaplanes, flying in both directions twice each week. Schildhauer told the Civil Aeronautics Board that he would fly passengers, mail, and freight, with bases at New York and Baltimore and stops at New Orleans and San Francisco. At present air traffic coordinator of the Naval Air Transport Service, Schildhauer would staff his company with a maximum number of Army and Navy Reserve members. He indicated that the Martin Mars type of aircraft would be used and that the planes would be suitable as Navy auxiliaries in an emergency. Operating company would be U. S. Flying Ships, Inc.